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THE
BUTTERFLY HUNTERS.

BY
HELEN S. CONANT.

WITH ILLUSTRATIONS.



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P R E F A C E.

IN offering this little volume to the public of youthful readers the author wishes to say that it has no claim to the completeness of a scientific treatise, but is merely the result of a summer's rambling through the woods and meadows of New England. It is, however, accurate as far as it goes. The illustrations have been drawn and engraved, with great care and accuracy, by MR. ALBERT C. RUSSELL, of Boston, from specimens in the author's collection, and all the descriptions have been carefully studied from nature. The volume is published with the hope that it will awaken in boys and girls a greater interest in the study of a delightful branch of natural history ; and the author will be fully satisfied if other little folks find in reading it as much pleasure as it has already given to a little boy named Tom, for' whom it was written, and to whom it is fondly dedicated by his

MAMMA.



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THE BUTNERS

CHAPTER I.

INTRODUCTORY.



ONE beautiful evening in the early part of April, Rose and Hal Merton were standing together under the big Elm-tree which shaded the lawn in front of their father's house. They were looking down the long hill, up which wound a narrow country road, that passed under the wide-spreading branches of the Elm, and then twisted off round the foot of the mountain.

"Rose," said Hal, "I wonder what kind of a fellow Cousin Tom is. I more than half wish father had not invited him to spend the Summer with us."

Rose smiled, and pointed down the road. "You will

soon find out what kind of a fellow he is," said she, "for there comes the carriage."

Hal and his sister turned and walked to the front gate, where they waited until Mr. Merton drove up and presented Tom to his cousins.

Tom Stewart was the only son of Mr. Merton's sister. His father was a wealthy Boston merchant, and Tom had passed all his life in the city home, his country experience being limited to Summer excursions with his parents to some fashionable resort. Close confinement to study, and lack of good, hearty exercise, had begun to show their effects upon Tom, and, although a tall, handsome boy of fourteen, he was pale and slender as a girl. It was to put color into his cheeks, and strength and vigor into his whole frame, that Mr. Stewart had sent him for the Summer to share the country sports of his cousins.

Tom was quite homesick the first evening at the farmhouse, and had but little appetite for the fresh biscuits and baked apples and cream his Aunt Merton had prepared for his supper. Even the kind attention of Rose failed to cheer him up, and he was glad when the time came to take his candle and go up stairs to the neat little chamber he was to occupy during the Summer.

When Tom waked the next morning all the homesickness of the previous evening fell back heavy on his heart. He thought he never could and never would like the

country, or anything about it. But by the time he was ready to go down to breakfast, the fresh air and clear morning sunlight began to exercise an exhilarating effect upon his spirits. Hal was whistling a lively tune out under the Elm, and Rose was singing as she sat at work on the front doorstep.

"Good morning, Tom," said she; "are you rested yet? Mother has saved breakfast for you, and I guess that by this time you must be very hungry."

"Have you had breakfast already?" asked Tom.

"O yes, of course," said Rose, with a merry laugh, "several hours ago. But never mind. You will soon grow accustomed to country hours, and rise with the earliest."

Tom ate his breakfast with a good appetite, and then went out under the Elm to see what his cousin Hal was doing.

Hal was sitting on a large flat rock, and seemed to be very busy over something, but he looked up as Tom approached.

"Come and help me, Tom," said he; "I caught my net in the bushes yesterday, and am trying to mend it."

"Your net, Hal! Are you going fishing?"

"O no, not to-day. Besides, do you suppose I could catch fish with this gauzy thing? You will learn better than that before you have been here many weeks."

"What are you going to do with it, then?"

"Well, you see, our class in school are just commencing the study of Lepidoptera, and —"

"Study of what?" interrupted Tom.

"Why, don't you know? The study of butterflies and moths. We catch specimens and take them to our school-teacher, who tells us all about them."

"Why, do you really catch them in nets?"

"Yes. I was out hunting all day yesterday; but I had n't any luck at all, though I chased a dozen all over the fields. You see we have to begin hunting early in the season, because the various kinds of butterflies appear in different months, and it 's already time for the earliest to be creeping out. Those which come latest in the Autumn crawl into the cracks of barns and sheds, and sometimes into piles of wood, and live there through the Winter, and it is to hunt for these that I am going out to-morrow."

"What do you do with the butterflies when you have caught them?" asked Tom.

"O, you 'll see. Rose will make you a net, and then you can go hunting with me. A few tramps over the mountain will do you good. As you look now, I would n't give much for you among us country boys at any sort of a game."

Tom was at first inclined to resent this uncomplimentary speech. Though of slighter form than Hal, he was already quite expert in gymnastic games, and his muscles

were firm and nervous. But, as he looked at his stout and sturdy cousin, he thought it best not to boast too loudly.

Mending the torn net proved to be too nice a job for Hal's skill, and the boys went into the house to ask Rose's assistance.

Of course Tom must have a net too, so Hal immediately set to work upon the frame. He took a common flat barrel-hoop, and slit off a strip about a quarter of an inch in width. Of this he made a hoop about a foot in diameter, which he bound with wire to a light hickory rod of the thickness of a parasol handle and about three feet long. When he had completed his frame, Rose took a circular piece of mosquito-netting, about three quarters of a yard in diameter, and bound it firmly to the hoop, and the net was finished. Butterfly nets can be bought ready made ; but any boy who is handy with his knife can make his own. The frame should be light so as not to fatigue the hand, and at the same time strong enough to endure a good deal of rough work among the bushes. A piece of ratan from an old umbrella makes a good hoop ; and nothing is better for the handle than a farmer's goad-stick or wooden whip, which is light, strong, and not too elastic. Great attention should be paid to joining the handle to the hoop. If this is not firmly done, the frame may come in two when you are in hot pursuit of butterflies, and if you have not with you the means of repairing the damage, you may lose your whole day's sport.

CHAPTER II.

THE FIRST BUTTERFLY.



AN early Spring morning in New England possesses a sweet charm of its own, unequalled in any other part of the world. The warm rays of the sun melt the deep Winter snows and send merry rivulets dancing and sparkling down every hillside. The meadows are wet and soft, and all the hollows are miniature lakes, by which the green grass already shoots up in tall, slender spires. Along the roadside, and under the old stone walls, the dingy snow-banks waste rapidly away, giving place to banks of emerald turf and delicate wayside flowers.

It was on one of these sweet mornings that Hal, with his net and box and bottle of ether, started out with Tom to hunt for the first Spring butterfly, the Antiopa, which, after living all Winter in old buildings or wood-piles, creeps out to die in the warm April sunshine.

"Are we going to tramp all over the wet, splashy meadows?" asked Tom.

"O no," answered Hal, "not to-day. But you need n't look so fearfully at the wet fields, for long before Summer

is over I shall go straight through mud and water, and so will you. To-day we will only hunt round the barns and woodshed, although Mr. Benedict says the Antiopa is often found in warm, sunny places in the woods.

"Who is Mr. Benedict?"

"He is our teacher. A real jolly man he is, too, and all the boys like him. But why did n't you bring out your net?"

"Rose has not finished it yet. I shall catch about as much with the net in her work-basket as if I had it out here."

"Don't say that, Tom. But as your hands are empty, you may as well carry my box."

"You don't expect to fill this big box to-day, do you?"

"The box will hold *one*, if I have the luck to catch it," said Hal, laughing. "But, you see, perhaps we shall hunt for nothing all day. Butterfly-hunting takes just as much patience and skill as fishing, only it is more active sport."

While they were talking, the two boys walked leisurely along through the yard back of Mr. Merton's house. They climbed over the bars, and went down the lane to the barn.

"Hal, what are you going to do with this ether?" asked Tom. "The smell makes me feel just as if I was going to have a tooth pulled."

"I am going to serve the butterflies just as the dentist

serves you," replied Hal. "Soon as I catch one I put a drop of this to its nose, and put it to sleep so that it will feel no pain. Then I fasten it with a pin to one of those pieces of cork you see in the box. I put the butterflies to sleep before taking them from the net, or else they would flutter and struggle so as to destroy all the delicate down on their wings. But you shall see. Come along."

The noon sun had spread its full glory of warmth and light through the air, and the boys stepped very cautiously, for Hal said they might find a butterfly hovering over any of the old logs that lay scattered about in the grass.

"Keep a little behind me, Tom," said Hal; "for the Antiopa are very shy, and if I see one lighted I want to throw my net over it before anything starts it. This kind fly very high, and it is n't easy to chase them."

"Why, Hal, I thought you had just begun to study Lepi— What do you call it? But you seem to know all about the habits of the butterflies now."

"Of course I have had to study some before beginning to catch them," replied Hal; "and, besides, last Autumn I hunted and found a few, but I was awkward then, and tore them all to pieces trying to arrange them on the corks.— Stop! stop! There's one lighted on that old log."

Hal stole softly along, and threw his net, but the beautiful insect floated up over the roof of the barn, and finally lighted far above Hal's reach. Hal did not stop

to reply to Tom's loud, ringing laugh, but went on quietly looking for more butterflies, turning every now and then to see whether the first one had flown from the roof. It soon darted off over the other side of the building, and Hal chased after it, leaving his cousin behind. Very soon Tom heard Hal calling for the box and ether.

When Tom came up, Hal had gathered the net up into a bunch, confining the insect in a small space. He was holding it very carefully to keep it quiet, until he could put it to sleep with a drop of ether. Tom held the bottle, while Hal with a delicate brush dropped a little ether on the butterfly's head. The insect soon ceased moving, and Hal then fastened it by means of a long, slender pin to one of the corks in his box, and spread out its wings so as to show all the beauty and variety of the colors.

"You punch it with your ugly pin as if it was dead instead of asleep," said Tom.

"Yes, I know I do; and perhaps it is dead," replied Hal, all the while busily arranging the wings before they grew stiff and brittle. "Sometimes they wake up," he continued, "and then I have to give them another dose of ether."

It was now nearly time for dinner, and the boys turned to go into the house. In the yard Hal succeeded in catching two more butterflies of the same kind.

"Why do you keep so many just alike?" asked Tom.

"The specimens are not always perfect," answered Hal,

"and then we want a pair in our collection. The female is always larger and more beautiful in color than the male. Besides, with many butterflies the under side is quite as interesting to examine as the upper. So we catch all we can, and afterwards select the finest specimens to keep."

The boys stopped to show their specimens to Rose, who was waiting for them in the doorway. All three then went in to dinner.

In the evening Hal and Tom went over to the school-house, where they found Mr. Benedict, the teacher, who was a great favorite with the boys, sitting in one of the recitation-rooms. About twenty boys were gathered near him, and on the table at his side lay several large books and a number of small boxes. The boys were all talking eagerly; and Frankie Mason, a bright-eyed little fellow of ten, was telling the teacher how hard he had worked all day without catching a single butterfly, when the door opened, and Hal and Tom, with Johnny Webb, came in with their boxes, and laid them on the table. The boys then took their seats, and Mr. Benedict commenced as follows.

"In the beginning I shall make our study as simple as possible, and leave all the difficult things till we are better able to understand them. We will study the butterflies by what we can see with the naked eye, because very few of you possess microscopes."

The teacher stopped and turned to his table. Each boy had brought his specimen in a neat paper box, on which his own name was written, so that Mr. Benedict might know whose butterfly was the best preserved. He smiled as he looked at some of them, for they were torn, and the down on the wings nearly rubbed off.

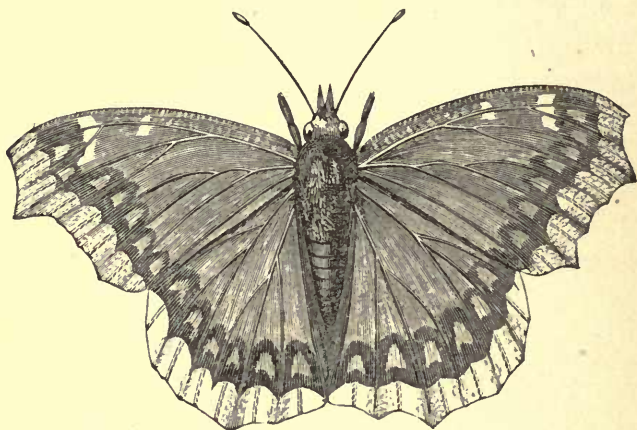
"That's mine," said one of the big boys, as the teacher laughingly held up one forlorn insect, of which little was remaining save the body and a broken piece of a wing. "I brought it to show you I had tried."

"Never mind, Gilbert," said the teacher, "to catch the butterfly at all is better than nothing. Only next time you must handle it with more delicate fingers."

After looking over all that had been brought in, the teacher told the boys that he should make the *Antiopa* the subject of this lesson, although several boys had found specimens of other early varieties. The *Antiopa*, having lived over Winter, was properly the first one to be considered. Hal's specimens were very well arranged, but Johnny Webb had found a more perfect insect, so the teacher selected the latter specimen to show to the boys.

"The *Antiopa*," said he, "belongs to the genus *Vanessa*, because the wings are jagged or tailed on the hind edge. The wings expand from three to three and a half inches." He held up Johnny's box in his hand, and all the boys looked eagerly at the beautiful insect expanded in it.

"You see the wings are of a purplish-brown color, with a broad buff-yellow border. Just inside the border is a row of pale blue spots. Even this fine specimen," he



The Antiopa.

continued, "is somewhat faded, as these butterflies always are in the Spring. The butterflies of this brood which are flying about now will very soon die. They will first deposit their eggs on the Elm and Willow trees, where the caterpillar lives after it is hatched, until about the first of July, when it becomes a chrysalis. The butterfly breaks the chrysalis in about two weeks, and when it first creeps out and spreads its fresh wings in the sunshine, the color on them is very brilliant and rich as velvet. This brood of Antiopa is very short lived. It

deposits its eggs and dies, and a second brood of caterpillars is hatched, which goes through all the changes, producing the butterfly again before Winter. In the Autumn you will find these butterflies hovering over the heaps of apples in the orchard, and that will be the best time to secure them for your collection."

CHAPTER III.

FLOWERS AND BUTTERFLIES.

 SEVERAL weeks after the first hunt for the Antiopa, Tom and Hal, together with Hal's cousin, Johnny Webb, started off one bright May morning to hunt for the small yellow butterflies, which Mr. Benedict had said they would find flying about in the sunny fields.

It was yet too early in the morning for butterflies to be out, for they keep very quiet until the sun has dried the dew from the grass and flowers, so that they can fly without fear of injuring their delicate wings. But the boys had started off early to have a hunt for flowers and moss for Rose to arrange in her vases. They crossed the road in front of Mr. Merton's house, and climbed over the wall into the pasture. A lot of sleek, sober-looking cows were nipping the short green grass, and lifted their noses with a good-morning sniff as the boys passed.

"Let 's walk all round by the wall," said Johnny, "and when we get to the farther corner, where the nut-trees are, we 'll climb over into the Birch-grove. Early Saxifrage grows there, and I told Rose I 'd bring her home a bunch of it."

"Hallo, there 's our Fort," said Hal. The boys stopped and examined with great interest a big square enclosed with a stone wall, which it had taken Hal and some other village boys the whole of a last Autumn's holiday to build. The Winter frost had displaced many of the stones, and one side was quite thrown down. "All open to the enemy," said Hal, as he walked up to the breach. "Don't you remember," he added, "how old Farmer Rogers, in his long blue frock, chased us and yelled at us because we stole a whole heap of his cider apples for shot and shell?"

"Yes," said Johnny, soberly; "and father was so sorry about it, that he sent the old man a barrel of our best Baldwins in return."

"It was a mean trick in us boys, any way," said Hal.

"Only see the Violets and Anemones," said Johnny. The boys looked down under the Alders by the wall, and were soon on their knees, plucking handfuls of the delicate Wind-flowers and Violets. Before they reached the nut-tree corner, they had gathered great bunches of Dandelions, Liverwort, and Wild Geranium.

"Chip, chip, chip," said Hal, as a striped squirrel darted nimbly past them. The squirrels had a whole colony of little burrows in the nut-tree corner, and might be seen having a grand frolic there any warm sunny day.

When the boys reached the corner, Tom threw himself

down under one of the trees, right into a whole bed of blue Liverwort, and began to arrange the flowers he had gathered. Johnny climbed over the wall into the Birch-grove, after Early Saxifrage, and soon came back with his hands full.

The boys soon gathered so many flowers that they agreed to leave them under the nut-trees while they went off for butterflies.

"Let 's separate," said Hal, "and each see what he can do alone. Then afterwards we will all meet here again. Hallo, there goes a butterfly, now,"—and saying this, off he darted after it, going over the wall and up the side of the hill, almost as fast as the insect he was chasing.

Johnny went to a little pool of water and dipped some Birch branches in it, which he brought carefully back and laid over the flowers to keep them fresh and protect them from the sun, and then he and Tom started off in opposite directions.

In about an hour the boys met again at the nut-tree corner.

"Well, Tom, you have got your box full, of course," said Hal, as he sat down on the grass to take breath, and, throwing off his cap, pushed his damp, curly hair back from his forehead.

"Now, Hal, you are too bad. You know I never tried before," said Tom; "but I have done as well as Gilbert did, any way."

He opened his little box and showed Hal and Johnny a poor crushed insect, with its legs and antennæ all broken off.

"Now see here," said Hal, "I 've caught six."

"Look at that one," said Johnny, "with a beautiful shaded border."

"Yes," replied Hal, "that is a female butterfly. Mr. Benedict described it to me. I only caught one, although I chased another half-way down the other side of the hill. Now, Johnny, show us your boxful."

Johnny laughed, and put his box away in his pocket. "The warm sun made the things too lively," said he; "I had a hard run, and threw my net ever so many times, but the butterflies always darted off into the air. And all the while I could see you off on the hill, down on your knees and boxing them up."

The boys gathered up their flowers and went home. Johnny gave a large bunch of the Saxifrage to Rose, and carried the rest home to his sister Annie.

In the evening the boys all met again at the school-room. Mr. Benedict was much gratified to find the boys taking so much interest in their study, and he praised them for the number of specimens they had brought, and for the careful manner in which most of them had been prepared.

"These beautiful yellow butterflies," said he, "belong to

the genus *Colias*, and are distinguished by the following peculiarities: six legs, short antennæ thickened towards the end, and —”

“Antennæ. Do you mean those horns?” interrupted little Frank Mason.

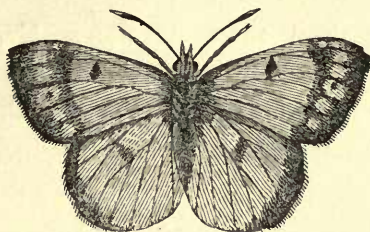
The teacher encouraged all such questions, but could not help laughing at Frank’s eager manner.

“O yes, Frank,” said he, “those are what I mean, and you may call them horns if you choose. There is time enough for a little boy like you to learn the proper names. You see,” he continued, “that the horns are thicker toward the end. The color of the wings is bright yellow, with a black border. On the female of this butterfly this border is very broad on the fore wings and beautifully shaded. The fore wings have a small black dot near the centre. This dot is just alike on both sides, while the round orange-colored spot on the middle of the upper side of the hind wings is replaced on the under side by a silvery spot with a rusty looking ring round it. The hind wings are rounded and have a smooth edge, and near the margin on the under side are three delicate dots.

“The male of this butterfly is smaller than the female, and the black on the border of its wings is more dense in color.

“This butterfly’s name is *Colias Philodice*. It is very fond of Clover, and often deposits its eggs upon it.”

"Does it live all Summer?" asked Gilbert. "I remember seeing some that looked just like it, hovering over father's late Clover last Autumn."



Colias Philodice.

"No," replied Mr. Benedict, "this early brood will all disappear, and about the first of August another brood will come out. The late brood is much more numerous than this early one. These butterflies will often fly in such quantities in fields where the late Clover is in bloom, that you could not throw your net without catching three or four at one time. Now, boys," he continued, "there is a very large and beautiful butterfly which appears about the last of May, and when you are out hunting specimens for next week's lesson, I want you to look for it. It is of a beautiful lemon yellow, ornamented with black stripes. This butterfly is as large as any we have. You must look for it in warm and sunny places. Very few butterflies live in the woods, and those that do, such as the Hipparchians, come much later in the season. At this time of the year

they fly about in the open fields and by the roadside. They delight to hover over the bushes that fringe the old stone walls. You will find them in these places any sunny afternoon."

After giving them these directions, Mr. Benedict dismissed the boys. As they went out they all passed up by his desk, and he returned each boy the little box he had brought containing specimens.

CHAPTER IV.

A RAINY MORNING.



T was a sweet moonlight evening, and Tom and Hal walked slowly home with Johnny Webb. Rose was spending the evening with Annie, and the boys were to call for her on their way home.

Mr. Webb's house was a large farm-house, standing with its gable towards the road, as so many of the New England farm-houses were built long ago. The boys opened a little wooden gate and walked towards the house between two rows of Syringa and Lilac bushes, until they reached the porch, where they found the girls. Annie, who was lame from the effects of a fall received when she was a very little girl, was lying on a lounge, which Mrs. Webb had drawn to the door for her, her sweet pale face looking lovely and quiet as the moon shone upon it. Rose sat upon a low seat by her side.

"Come, Johnny," said Annie, "tell me what the lesson was about to-night."

"O Annie! Mr. Benedict says we must hunt next week for the biggest butterfly you ever saw."

Annie laughed heartily at Johnny's boyish eagerness.

"I saw some of those great yellow butterflies he told about, in a Museum once, under a glass," said Tom; "and I thought then they were painted instead of being real butterflies."

"I 've often seen them flying about," said Hal, "and once I caught a big one in my cap, but he was broken all to pieces and I threw him away."

"Well," said Johnny, "now Mr. Benedict has taught us how to use nets, I think I can catch one without breaking it."

"Annie, don't you feel very tired sitting still here all these pleasant Spring days?" asked Tom.

"O no," she replied; "I can look out of the window and watch mother working among her flowers; and then Johnny is such a good boy, and brings me in mosses and wild-flowers almost every day. Only I do long sometimes to be out in the woods myself, and feel the soft Pine carpet under my feet and hear the roar of the wind in the tree-tops."

"And so you shall, Annie," said Hal. "Some warm day I will carry you to the woods myself."

Then the boys told the girls that after a while they were going to have a grand picnic in the grove at the Den Rocks, and Mrs. Webb said if Annie was well enough she should be carried to the grove to enjoy it with them.

It was now time to go home; and after saying good

night to Annie and Johnny, Rose and the two boys walked up the hill to Mr. Merton's house.

A few days after this Hal and Tom laid a grand plan, that, as the next day was Saturday, and there would be no school, they would have a hunt for butterflies, and afterwards come home through the Rail Swamp to get some Rhodora and Shad-flowers for Annie. But Saturday morning dawned and the boys were sorry enough to find a heavy rain pouring down, and the dismal prospect before them of spending a day in-doors. After breakfast they sat down and tried to look over Hal's book on butterflies, to see if they could find out anything more about the big yellow one they were going to hunt for. They read a little while, but the big words puzzled them, and, besides, they were possessed with that restlessness peculiar to boys when they are made to stay in the house against their will. Finally Tom threw the book impatiently on the table.

"I don't know one word I 've been reading," said he.

They then went up stairs to Hal's little room and began to look over drawers and boxes filled with sundry old things, precious to boys. There were portions of old clock-work, pieces of lead, bits of tin and wire, little bundles of nails and screws, and in a chest that stood on one side of the room was a very neat set of small tools.

In one corner of the room stood an unfinished model

of a saw-mill, complete in all its parts, with the exception of the great wheel, the materials for which were lying on the workbench under the window. Tom was immediately interested in the neat workmanship and ingenuity of the model, which he examined with the greatest attention. Inside, everything was in perfect order, and ready to be put in motion, and Tom proposed that they should spend the rest of the morning in finishing the wheel. Hal at once agreed, and immediately set to work. The model was about three feet in length, and about eighteen inches in height. One side and one end were open. The other side and end were boarded up, and the roof was neatly covered with miniature shingles. The great wheel, which was to be on the side which was boarded up, was twelve inches in diameter. It was constructed on the "overshot" principle, and the buckets were about two inches in width and nearly an inch in depth. The separate parts were already finished, and Hal had only to put them together with neat wooden pegs. While at work he explained that he had built a splendid mill-dam on the Mountain Stream, where he intended to set his mill. The foundation was all ready, and as soon as the wheel was finished and secured to the shaft they could set the mill in its place and commence sawing miniature pine logs.

CHAPTER V.

THE HILL-PASTURE.



IN this way the forenoon passed rapidly. After dinner Tom went to the window, and off over the barn he saw, to his great delight, a piece of blue sky through which the sun very soon shone, while the clouds all broke up into big white groups and floated out of sight.

"Come, Hal, I say, let 's be off in a hurry," said Tom, as he hunted round for his cap and net.

"You need not go yet, boys," said Rose; "for the butterflies won't come out until the sun has dried the grass a little."

Rose had taken up Hal's book, which lay on the table, and was turning over the leaves slowly as she spoke.

"See here," said she, "in describing that butterfly you were talking about this morning, this book says that it lives round the apple-trees and leaves its eggs on them. I wish one of you could find me a chrysalis. I would keep it for you in a warm, dry place, until the butterfly came out of it."

"O, Annie is going to keep all the chrysalids," said Hal. "Her father has made her a nice box with a glass cover,

and she keeps it on her work-table. Johnny has found some for her, and I promised to carry her mine."

"You shall carry them to her," said Rose. "Annie has to sit still all day, and it will amuse her to watch them."

By this time the sun was shining very bright and warm, and the boys started off.

With their nets thrown over their shoulders, and each one carrying his specimen-box, they walked up the little narrow road that wound by the foot of the mountain. It was one of those delicious little country roads, in which there is a beaten track for each wheel and one in the centre trodden by the horse's feet, and between the tracks a little ridge of grass. A thick hedge of Birches and Alders bordered each side of the road, broken only here and there to give room to an old moss-grown pair of bars. The boys walked along, each trying to balance himself on the narrow ridges of grass. Tom slipped off several times, his feet going plump into little pools of water which had settled in the wheel-track after the rain. Finally they stopped, and leaned on an old pair of bars.

"Tom," said Hal, "we may as well go right off into the fields. In this road the trees and bushes keep it so damp that the butterflies are afraid to fly."

So they jumped over the bars, and, after crossing a broad marshy brook on some stepping-stones which Hal had placed there long before, they ran up the slope of

the hill-pasture. This was where Mr. Merton's oxen were turned out to lie in the grass when they were not in use. One splendid pair were lying there now, and they lifted their large eyes drowsily as the boys ran past them. Tom was in hot pursuit of a great butterfly he had just started up from a bunch of Clover. He raced over to the farther side of the pasture, and clearing the wall at one bound, disappeared on the other side. Soon Hal saw his net flying along far up the road, and at last go out of sight behind a big cluster of Willows.

Hal himself soon found several of the butterflies he had come out to hunt for hovering round the margin of a shallow pool in the pasture ; and after creeping about slyly for some time, he succeeded in capturing several fine specimens. He gave them a dose of ether, and then climbed over into the road on the opposite side of the pasture from where he had entered it. Then he sat down on a big stone to arrange the wings of his butterflies and to wait for Tom's reappearance.

Before long Tom came back, his face flushed with his long race. He carried his little box very carefully in his hand.

"O Hal!" said he, as soon as he came near enough to speak, "I've caught a splendid fellow! Look here."

He opened his box and displayed a large black butterfly with brilliant dots on its wings.

"I never saw one like that," said Hal. "We 'll carry it to Mr. Benedict to-night and ask him what it is."

"He is a strong old butterfly, any way," said Tom. "He struggled hard for his life. I could n't help feeling sorry for him, he was so silent about it."

"I know it, Tom; the butterflies can't make the least noise, no matter how bad we treat them. I caught a Bumble-bee by mistake the other day, and he made such a fuss with his *wumble, wumble, wumble*, that I was glad to let him go."

It was now so late that the boys agreed to go for Annie's flowers some other time. Hal said perhaps Rose would go with them, and then they would all visit the old cellar hole together.

In the evening Tom and Hal took their specimens and went early to the meeting of the class.

"Well, boys," said Mr. Benedict, as he rose to commence his lecture, "you have done remarkably well. I shall speak to you this evening about the *Papilio Turnus*. This butterfly takes its place among the largest we find. Its wings expand nearly five inches. The color is, as you see, a brilliant yellow with a broad border of black dotted with yellow, on the edge of the wings."

Mr. Benedict held up the box containing the butterfly he had selected as the best specimen for the evening, and little Frank Mason could n't help exclaiming, "O Mr. Benedict! that 's my butterfly!"

"I see it is, Frank," said the teacher; "and I must praise you for having mounted it so neatly."

"But my papa helped me catch it, and he fastened it in the box for me, too," said Frank.

All the boys laughed at Frank's open-heartedness.

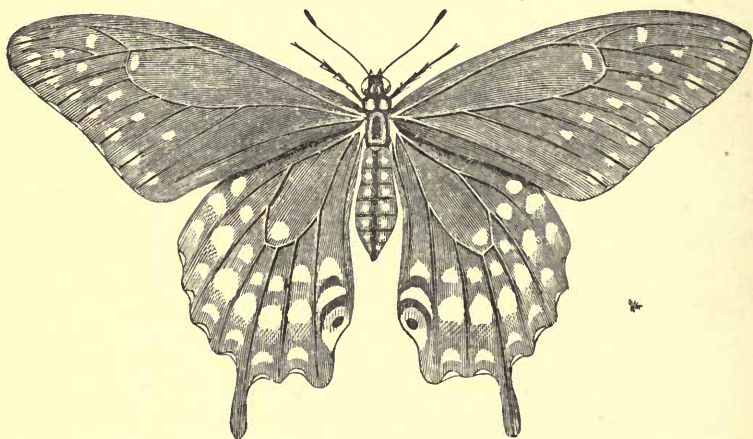


Papilio Turnus.

"The fore wings of this butterfly," continued Mr. Benedict, "are crossed by four bands of black, extending backwards from the front edge. On each hind wing is an orange-colored spot and at the back a little tail.

"This beautiful butterfly is usually seen flying about the

apple and cherry trees, on which it leaves its eggs. You will often find the chrysalis on these trees. It remains there through the Winter, and the butterfly does not leave it until the last of May or first of June. The *Papilio Turnus* flies very high, but it often descends and hovers about small pools of water after a shower. Some seasons



Papilio Asterias.

it is very common, and may be found in great numbers in any orchard or pasture where old apple-trees are standing. Almost all the large varieties of butterflies vary in numbers in different years. Some years they disappear almost entirely, and the following Spring they will perhaps come out more abundant than ever.

"For our next lesson I will tell you about this butterfly of which Tom Stewart has brought in one specimen. It is very handsomely arranged," said he, as he turned with an approving smile to where Tom sat. Tom Stewart's face glowed with pleasure, and he felt more than paid for his hard chase.

"This butterfly," continued the teacher, "is called Papilio Asterias. I want you all to go home and take your book and see what you can learn about it. Next Wednesday we will meet here again, and each one shall tell me what he has been able to learn alone by himself. We shall meet twice a week after this evening, because at this season the different kinds of butterflies are coming out very fast."

CHAPTER VI.

THE OLD CELLAR HOLE.



ONE pleasant afternoon before the next meeting of the butterfly class, Hal and Tom persuaded Rose to go with them, after school hours, for a long walk about the pastures.

Rose had prepared a little basket of luncheon to eat out under the White Pine, and they were all ready to start when Hal came home. They looked just like a picnic party as they went off down the lane. Hal carried the basket, which was pretty heavy, and Rose carried his net for him. Tom had his net too.

They walked fast across the open field, but when they came to the bushes they had to step carefully on the little tufts of moss and dried grass, as the ground between them was damp and soft, and here and there they came to little pools of water, which they either had to cross with a jump or go around.

"Father calls all these pastures the Rail Swamp," said Hal. "It is never so dry here that the cattle cannot find water enough to drink."

"I don't see why we are coming among these bushes," said Tom. "I've caught my net and torn it already."

"Why, we are coming for Rhodora," said Rose. "It grows along by the wall just the other side of the thicket. But you would better carry back your net and leave it on the grass. I wish you would take Hal's too, for I need both hands to gather flowers with."

Tom took the nets and went back with them. When he returned, Hal and Rose had disappeared in the thicket; but he could hear their voices calling him, and he soon found them by the side of an old moss-grown, tumbling wall. By its side stretched a long, dark pool of water, in which the wall and bushes and trees were clearly reflected, and along whose margin grew the Rhodora. The beautiful plant was in full blossom; some of the pretty purple petals had fallen off and were floating slowly about on the surface of the water. The children gathered a large bunch, and then sat down on a great bed of moss to rest, before going back for their nets. Rose gathered some of the moss and amused herself by placing in it such flowers as she found growing there. There was Solomon's Seal and Wild Geranium, and under a large Alder-bush Tom found a whole bed of Nodding Trillium, or Wake Robin. When they had gathered all they could carry, they went back to the place where they had left their nets.

By this time Hal felt hungry, so Rose said they would eat their luncheon before visiting the old cellar hole. To reach the White Pine they had to walk along by the wall in the cow-path till they came to a clump of Pine-trees. In the centre of this clump stood the White Pine. This tree was the largest of the group. Under its wide-spreading branches was an open space covered with a soft Pine carpet. The other Pine-trees grew all around so as to shut it in entirely, making a pleasant bower, where the children often came on hot Summer days. On one side Hal had trimmed the branches so as to make a little arched entrance. They all sat down under the tree, and Rose spread out the contents of her basket. Tom thought he had never eaten anything so nice as the thin slices of bread and butter, and apple-pie and Dutch cheese. When they had eaten their luncheon, they laid their moss and all the small flowers in the basket, and then strolled off in the direction of the old cellar hole.

As they walked along, Rose told Tom all she knew about the cellar hole. There had been no house there for a great many years. Almost one hundred years ago, when the house was new and when the little narrow lane upon which it stood was one of the travelled country roads, a young sister of General Israel Putnam was brought home to it, a bride. Here she lived for many years and had a large number of children, both girls

and boys. No doubt there was many a jolly wedding in the house, as the daughters, one by one, passed away to other homes. There was sadness there too, for in an old briery cemetery near by there is a gray, moss-covered stone, "Sacred to the memory of Mary F——n, who departed this life June y^e 21, 17—. Aged 15 years." After this family were all scattered or dead, the house fell into decay, and finally one stormy Winter night it was blown down.

"Old Goody Wood told me all this," said Rose ; "and when I go to the cellar hole I always sit down and try to fancy the children playing on the green and the good mother spinning at the sunny open door."

By this time they had reached the bars at the entrance of the lane. They climbed over, and walked a long way through a shady little road, where the Birches and young Maples brushed them with their branches. After a while they came to a bend in the road, and, turning it, found themselves in an open, grassy space. Here was the cellar hole. It was not very deep, and was all overgrown with luxuriant grass. The bricks from the chimney and some of the stones from the cellar wall were tumbled here and there in heaps. At the side nearest the road lay the large, flat door-stone.

"I can imagine old General Putnam sitting here," said Rose, "telling stories to all his nephews and nieces about the strange scenes he had passed through."

Off at one side of the cellar hole was the place where the well used to be. It was all filled up, and a few stones were heaped on the top. Some blackberry-vines, covered with white blossoms, were running over them. Farther back was a small place sunken in the ground, where Hal said the barn must have stood. On one side of the door-stone grew a large clump of Lilac-bushes. There were a few blossoms on them, which Rose gathered to carry home. It was very still there. The only things in motion were a few birds, which hopped about and twittered on the branches of some scraggy apple-trees.

Rose sat down on the old door-stone, while the boys hunted about for butterflies. They found some little red and brown ones, which Hal said were sometimes very plenty. He had seen whole swarms of them flying by the roadside, but he did n't know their name. They hunted about until Rose called them and said they had only time to reach home before sunset.

On the way back they found large bushes of Shad-flower in blossom, and the boys carried home handfuls of the delicate white flowers.

After tea Rose arranged all the flowers in two large bunches, and Hal carried one of them to Annie.

CHAPTER VII.

BUTTERFLY TALK.



WHEN the class met again, Mr. Benedict asked the boys to tell him, as well as they could, what they had been able to learn about the *Papilio Asterias*.

They were all very shy about speaking. At last Gilbert said, "Mr. Benedict, there were two described in my book almost alike, and I don't see how we are to know them apart."

"They are very much alike, it is true," said the teacher. "The other one is the *Papilio Troilus*."

"The only difference I can find," said Gilbert, "is that the spot which is blue on the wing of the *Asterias* butterfly is greenish on the *Troilus*."

"I think, Sir," said Hal, "that these butterflies differ in the caterpillar instead of the butterfly."

"The caterpillar!" said little Frank Mason. "What do you mean by the caterpillar?"

"My dear Frank," said the teacher, "the caterpillar is the baby of the butterfly. It is hatched from the butterfly's eggs, and feeds about on various plants, according to its kind, until it is full grown. Then it changes to a

chrysalis, from which, in proper time, the butterfly comes forth. Can any one tell me," he added, "what the difference is between the caterpillars?"

"I can, Sir," said Ben Wait, a rosy, bright-eyed boy who sat in the back part of the room. "The caterpillar of the *Asterias* is what we call a Parsley-worm. It is green and black. I have often caught it creeping round on Parsley and Caraway in our garden. The *Troilus* caterpillar I have never seen, but my book says it lives on Sassafras-trees, and changes its color four times."

"That is all correct," said the teacher. "The caterpillar of the *Troilus*, like many other caterpillars, sheds its skin, and takes one of a new color, every week of its life.

"But we will not talk any more about caterpillars now. Some evening, when we have not so many specimens, I will tell you more about caterpillars and chrysalids.

"Now we will examine this fine specimen of *Papilio Asterias*. It belongs to the same species as the *Turnus* butterfly, described in our last lesson. Its wings expand nearly four inches. Its body is black, with two rows of yellow dots on the back. The wings are also black, with a broad band of yellow spots extending from the front edge of the fore wing to the back part of the hind wing, and a row of yellow spots on the margin. The hind wings are tailed, and between the band of yellow and

the row of yellow spots on the margin are seven blue spots. By the side of the blue spot at the hind angle is an orange spot, with a black dot in the centre. All the spots on the under side are dull orange. The female *Papilio Asterias* has but one row of yellow dots on the front wings.

"This kind of butterfly is most numerous during the month of July. You will often find it in your gardens, hovering over beds of Parsley and sweet-scented Phlox. It deposits its eggs on these plants, and it is there that the caterpillar we have already spoken about feeds. It often does much mischief by eating the leaves of Parsley and Carrots.

"As the *Troilus* butterfly resembles the *Asterias* so closely while in the winged state, I will describe it to you now. It appears about the middle of June. This kind is never very numerous, but perhaps some of you will be so fortunate as to find a specimen. The *Papilio Troilus* has but one row of yellow dots, and that is on the margin of both the fore and hind wings. The green on the hind wings is shaded into the tint of the wing, instead of being in distinct spots like the blue in the *Asterias*, and the orange spot has no black dot in the centre. The difference between these two butterflies is so slight that it is impossible to distinguish one from the other when they are on the wing."

Some of the boys had brought in specimens of small butterflies. Hal had brought those he caught flying round the old cellar hole, and when he first came in he had laid them on Mr. Benedict's table.

After finishing his lecture on the *Asterias* and *Troilus*, the teacher stood looking at these specimens. "If you choose to stay beyond the usual hour," said he, "I will tell you about a few of these small butterflies." All the boys held up their hands to stay, and Mr. Benedict continued his lecture.

"These little butterflies may be found almost all Summer. They hover near the ground, and often gather in large quantities about Clover and other honey plants. They are six-footed, and are generally classed together under the name of *Lycenians*. This small red butterfly is one of the prettiest of the group," said the teacher, as he held up a box containing a butterfly whose wings expanded about one inch. "It is very common, and you will find it fluttering over the grass in any sunny spot. It is



Lycæna Americana.

called *Lycæna Americana*, or American copper butterfly. The fore wings are of a brownish-red color, with six or seven black spots. The hind margin has a broad rim of dull brown. The hind wings are blue brown and have a few small black dots. They are bordered on the outer margin with black.

"This other specimen is called *Lycæna Epixanthe*. In shape and size it is similar to the copper butterfly, but all the wings are of a dull brown color, and are marked with a few black dots. A few orange spots ornament the margin of the hind wings. This species is somewhat rare. It is usually found hovering over damp meadows and low lands, and it does not delight in flowers so much as in green grass and sunshine."



Lycæna Epixanthe.

CHAPTER VIII.

THE RAIL SWAMP.



ANNIE WEBB was sitting one morning at the door of her father's farm-house. Her mother had arranged the easy-chair in the front porch so that she could sit and listen to the bees humming in the climbing rose over the door, while her nimble fingers twisted the crotchet needle in and out among the threads of the shawl she was knitting for her mother. As she sat working she heard the click of the gate-latch, and looking up saw Tom Stewart coming up the path. His clothes were spattered with mud, and his butterfly net, torn to rags, hung over his shoulder. He threw the big bunch of flowers he carried down on the path, and seated himself on the steps of the porch.

"Hal had gone to school, and the morning was so pleasant, I thought I would try butterfly hunting alone," said he, laughing and holding up his torn net. "You see what I have caught."

"Never mind the net, Tom," said Annie. "If you will go in and ask mother for a new piece of netting, I will cover it for you while we talk."

Tom went in, and soon returned with a piece of pink netting, and Annie cut it into the right shape for the hoop.

"Now tell me," said she, "where you have been."

"Well," said Tom, "I went into the Rail Swamp and found the small butterflies thick enough. Just as I was following some little red ones, a blue speck darted past me, and I gave chase. It flew over the wall, and I tumbled over after it. Then it flew back to the Swamp again, and back I went too. The perverse thing fluttered back and forth until I had knocked the skin all off my knees jumping after it."

"Johnny says he always waits," said Annie, "until he is sure the butterfly really means to go over the wall before he follows it. When he sees it fairly start off, then he is after it in a hurry."

"I 'll wait next time, see if I don't!" said Tom.

"Did you catch the butterfly after all?" asked Annie.

"O no. It suddenly darted off over the swamp, and I after it. I splashed through the pool where the Rhodora grows and tumbled over the old wall into the next pasture. The butterfly had lighted on a bush and sat folding up its beautiful blue wings so quietly that I was sure of catching it. I plunged forward among the low bushes, when suddenly down I went on my knees in a ditch half full of muddy water. A branch of a high blueberry-bush went through my net and pulled it out of my hand, and

when I rubbed the mud out of my eyes and looked round, the butterfly had flown away."

• "Then you gave up the butterflies, I fancy, and gathered flowers," said Annie. "I did not know the Sweet Viburnum was in blossom."

"What did you call it, Annie? Do you mean this large branch with pinkish white flowers?" asked Tom.

"No, that is Azalea. You gathered that down in the Swamp. This Sweet Viburnum grows round the stone walls."

"They are both very pretty flowers," said Tom, "and this Azalea smells sweet as Honeysuckle."

"Azalea is commonly called Swamp Honeysuckle," said Annie, "and I think it is the sweetest name. It makes one think of the cool, damp places where it grows. See how the flowers are crusted over with honey-dew. If you handle them they adhere together," and Annie crushed a few of the blossoms gently in her hand.

"Honey-dew!" said Tom; "it should be called honey glue: see how those blossoms stick together! The flowers are sweeter than the— what did you call it, Annie?"

"Sweet Viburnum, Tom. Yes, I think the Azalea has the sweetest flower, but the shrub is coarser than the Viburnum."

By this time the other boys came from school, and Tom went home with Hal.

At the next class meeting the boys brought a large collection of small butterflies, and Mr. Benedict said he would devote the evening to talking about them.

"I like the big butterflies best," said little Frank; "these little things are no prettier than wasps and bees."

"I think wasps and bees are pretty," said the teacher; "and perhaps when we have grown tired of butterflies I may tell you something about them. I am sure you would be interested to hear about some of the hanging wasp's nests with neat little cells inside, or the little mud-wasp who fastens his tiny cells to the stems of various plants."

Frank wanted to hear about these curious things at once, but the teacher said the little butterflies were just as pretty, and he should save the insects for some other time; so he went on with his lecture.

"One of the most delicate of all the small butterflies," said he, "is the *Polyommatus Pseudargiolus*. It is a big name for such a wee little thing," said the teacher, as the boys laughed, "and we will not use it. Such long words do not harmonize with such a pretty little creature. We will call it the Azure-blue butterfly. Its wings expand about one inch, and they are so very delicate that it is almost impossible to capture one without injuring it. Nothing is prettier than to see it fluttering over flowers in the sunshine, looking like a tiny speck of bright blue satin. The margin of the wings is of a blackish tint

or a deeper blue. The wings underneath are of a pearly-gray color dotted with black, and on the margin is the appearance of fine lace-work. Under a magnifying-glass it presents an exquisite appearance. This butterfly is not very common. Sometimes I have seen only one or two during the whole season. It loves sunny, warm places, and as it flies low and is not very shy, it is easily captured. It comes out the middle of June.



Polyommatus Lucia.

“The *Polyommatus Lucia* butterfly resembles the Azure-blue so closely that one is scarcely distinguishable from the other. The former is a little the smaller, and of a more purplish blue. The black border on the fore wings is not quite so broad, and the black spots on the under side are a little larger. This butterfly may be found all Summer, hovering over the low bushes in our pastures. It is not very common.

“There is one more of the genus *Polyommatus* which you can easily distinguish from those I have already described by a little fine tail on the hind wings. The wings are violet blue, with black dots on the hind margin. On the hind pair near the edge are two orange-colored crescents. On the under side the wings are gray, marked with black dots, and the two orange-colored spots have a black centre surrounded with a blue ring. This butterfly, which

is called the *Polyommatus Comyntas*, expands its wings about one inch. It lives in dry woods. You will not find it before July, but I mention it now because it belongs to the same genus as the two you have brought in."

"Mr. Benedict," said Frank, "I 'm so tired of all these little butterflies. I 'd rather hear about the mud-wasps."

"In the next lesson, Frank, I will tell you about a beautiful large butterfly, but now you must listen patiently to the description of these little ones. There are many small butterflies," the teacher continued, "belonging to the genus *Thecla*. Their hind wings are tailed, and there are some other peculiarities by which you can readily distinguish them. If you are interested to learn more about them, you will find a full description in your book. Their color is a dull brown of various shades marked in some of the varieties with specks of white or blue. They expand about an inch. The caterpillar of the *Thecla* is often injurious to vegetation. Hop-vines, for instance, are sometimes entirely ruined by that of the *Thecla Humuli*.

"For our next lesson we will take one of the largest butterflies that is seen on the wing during the Summer. It is not very common, and, as I doubt very much whether you will find one, I will bring a specimen from my own Cabinet."

"Do all butterflies belonging to the genus *Thecla* have tailed wings?" asked Hal.

"No," replied the teacher, "not all. On a few of them the wings are notched. Perhaps you would think them fringed, but you will soon learn the difference. You will probably find some of the *Thecla* butterflies, for they are quite common, and fly all Summer. There is one thing more by which you may distinguish them from the genus *Polyommatus*. The knobs on the antennæ are longer. The caterpillars are different in several points, but I don't think any of you will be interested in the study of caterpillars at present."

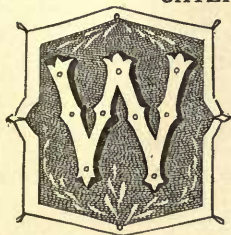
"I want to learn about them, Mr. Benedict," said Gilbert. "I wish you would give us that lesson you promised about the caterpillars and chrysalids. I am sometimes puzzled when you refer to these things."

Almost all the boys joined with Gilbert in asking Mr. Benedict to give them a lesson on the young of the butterfly.

"Very well," said he, "I will take that for the subject of the next lesson, and leave the large butterfly I told you about for some other time."

CHAPTER IX.

CATERPILLARS AND CHRYSALIDS.



HEN Mr. Benedict met the class again he commenced as follows:—

“No insect is so injurious to vegetation as the caterpillar, the young of the butterfly and moth. There have been many hundred varieties of these caterpillars discovered, but at present it is necessary for you to know about a very few of them only. If any of you, by this small beginning, acquire a love of the study, you will find books and teachers to instruct you, as you grow older, in all the details of the science. To-day I am only going to tell you a few of the most common things about caterpillars and chrysalids.

The butterfly or moth, in its winged state, deposits its eggs on different kinds of trees and plants. Instinct teaches it just what leaves its young will require for food; for when the caterpillar first leaves the egg it is so small and weak, that it is necessary that food should be supplied at once. As soon as it is born the caterpillar commences eating eagerly, and increases in size very rapidly. It almost always remains through its short life on the tree or

shrub on which it first makes its appearance. In size and color caterpillars differ greatly from each other. They are of all tints, from dull gray or brown to the most brilliant combinations of green, red, and yellow. The caterpillars of the moth are almost always larger than those of our common butterflies, some of them measuring three and four inches in length. Many species are covered with warts and bristles, and present a very ugly appearance.

"A caterpillar changes its skin several times, each time generally assuming a coat of a new color. Some caterpillars are born black, and after appearing in dresses of white, red, and orange, finally end their existence in a delicate coat of pea-green. Before each change the caterpillar leaves off eating and remains motionless a certain length of time. It sometimes suspends itself from a twig by a slight web, where it hangs until the old and dry skin crackles open along the back, when by various twistings and turnings the caterpillar frees itself from its old coat, and crawls off to commence eating again.

"When the caterpillar is full grown and ready to assume the pupa or chrysalis state, it seeks out a place of concealment and fastens itself to the under surface of some object, where it usually hangs by the hind legs. The skin then parts on the back and the covering of the chrysalis is formed by the drying and hardening of a transparent fluid immediately under the skin. The insect then appears as

a lifeless, oblong body with no distinct head or limbs. These chrysalids have a hard, polished outside, and are often very rich in color. Some are green or yellow, others rich brown. Some caterpillars of the moth spin themselves up in a web which they fasten to a twig or the under side of a leaf, and within this web form a cocoon. Others go into the ground, and there pass through the transformation."

"Could n't we catch the caterpillars, and watch the change?" asked Gilbert.

"You can at least try," replied the teacher. "I have made many experiments in that way, and some have proved successful. Once, about midsummer, I captured some hairy, brown caterpillars and placed them on my writing-table under glasses. Two of them died, but the third made himself very much at home, and went to work at once to prepare his little shroud. He nestled down on the board upon which the glass stood, and threw up a thin web which completely covered him. It was at first so very thin as to be almost invisible, but the caterpillar thickened it by degrees until at last he was visible only as a tiny dark spot in the centre.

"As a general thing my experiments have proved most successful when the caterpillars have been placed in a dark box. I remember once bringing in a box full of caterpillars of various kinds, and forgetting all about them for

some time. When I at last opened the box it was stuck all over with tiny chrysalids. In time these chrysalids all burst and little moths of different sorts came out of them.

“For some kinds of caterpillars it is necessary to provide earth in which they can bury themselves. I once brought in two small caterpillars from the grape-vine. They were shut up with some grape-vine leaves, but on opening the box in a few days I found them both dead. Shortly afterwards I captured three more of the same kind. These I placed in a box containing about four inches of earth. The next day on removing the cover of the box I found the caterpillars had all disappeared. After waiting seven or eight days I carefully dug up the earth. There, snugly stowed away under the surface, were three neat brown chrysalids.

“You will meet with many discouragements in trying these experiments, for your specimens will often die. Unless the caterpillar is just on the point of transformation when captured, it must be fed, and it is sometimes impossible, when the caterpillar is of a kind whose habits are not well known, to satisfy the fastidious taste of the little creature.

“The pupa state is the second period of the butterfly's existence. Its duration depends much on external circumstances. If the change in the caterpillar takes place during hot weather the butterfly will often appear in two or three

weeks, but if the pupa state occurs late in the Autumn, the chrysalis will remain closed until the following Summer. Sometimes when I have found chrysalids and kept them in a warm room, the butterfly has appeared in the middle of Winter. When the time for the change comes, the chrysalis swells and bursts, and from out of the dry husk the butterfly creeps forth and enters upon the third and last period of its existence. At first its wings are damp and crumpled. It perches on its old home until the air has dried and strengthened them, and then flies away to enjoy its short life in fluttering about from flower to flower.

"I don't think of anything more I can say that would interest you at present. If any of you wish to study the subject more carefully, you can turn to your books. There you will find many interesting details about the color, size, and habits of the caterpillars of different butterflies, and about the various ways in which they become chrysalids, assuming the appearance of utter lifelessness, while retaining the germ of life within. If any of you have any questions to ask," said the teacher, in conclusion, "I shall be very glad to answer them."

"I should like to know if the butterflies eat leaves, like the caterpillars?" asked Frank, who had amused himself by swinging his little feet back and forth all the while the teacher had been talking.

"O no, Frank. The butterfly has no big jaws like the caterpillar, but a little slender tongue, by means of which it sucks up honey from the flowers. It never does any mischief.

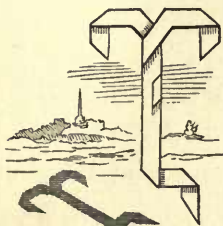
"I 'm glad of that," said Frank, "for I love the butterflies. The old, prickly caterpillars I hate, and I never thought they were anything but just caterpillars. I know little birds are little birds, but I don't see how caterpillars can be little butterflies."

"Well, Frank," said Mr. Benedict, "I am going to tell you something now that I think will please you. The woods are very pleasant and dry, and I think that some day next week we will have our picnic at the Den Rocks. I am going to invite the girls belonging to the Botany class to join us ; and, boys," he continued, "I want you to arrange with your sisters about carrying some baskets of luncheon, for you will all be hungry after a good frolic about the Rocks. I think that you would better meet some day after school and we will decide about all the arrangements. Next Wednesday will be a good day to go, because then we shall have to break up school for only half of the day."

Mr. Benedict dismissed the class, and as the boys left the school-room they formed themselves into little groups and went away, all talking eagerly about the picnic.

CHAPTER X.

THE DEN ROCKS.



HE next day, after school, Gilbert called all the boys and girls to a meeting on the green in front of the school-house. Gilbert was older than the other boys, and being a generous-hearted, manly fellow, was their acknowledged leader.

"May I come to the meeting, too?" asked little Frank, as he came out of the school-house with his satchel on his arm.

"O yes, Frank, of course we could n't do anything without you," said Gilbert, laughing.

"There is one thing I want you all to promise," said Frank, very soberly.

"What is it?" said all the boys at once, for Frank was a general favorite.

"I will tell you. I want you all to promise not to catch and bring in any of those horrid young butterflies that the teacher told us about last night."

All the boys joined in a laugh at this, and Gilbert said, "No, Frank, we will not throw our nets for a single one of them."

"But, Frank," said Johnny Webb, these caterpillars that you dislike so much are not young butterflies any more than eggs are young turkeys."

"I don't believe they are, either, only the teacher said they were the young of the butterfly, and I don't see any other young butterflies; for after they get their wings they never grow any."

"Mr. Benedict wants us all to meet in the grove at the Den Rocks next Wednesday morning at eleven o'clock," said Gilbert, "and we must make some arrangement about what we shall take for our lunch, so that all may not bring the same thing."

"Yes, we must have everything right about the table," said Ben Wait; "we boys shall be hungry as bears."

"We shall not want any table," said Jennie Graham. "It will be nicer to spread the things on the Rock in the shade of the great Oak-tree."

"O, I did n't mean a wooden table," said Ben. "The Rock will be best for the table and the seats too, but the cakes and sandwiches are what I was thinking about."

"Now, Ben," said Rose Merton, "you must leave all that to us girls, and I promise that you won't go hungry."

"Johnny, will Annie be well enough to go with us?" asked one of the other girls.

"I don't know," said Johnny. "Annie's foot is so lame now that she cannot use it at all. But mother said, if it was

a very pleasant day, Annie should ride to the grove and see us."

"I'll carry father's large camp-chair in the wagon," said Hal, "and we can stand it under the Oak and put Annie in it. It will be just as comfortable as her lounge at home."

"I don't think we have anything more to do," said Gilbert. "As Rose says, it will be best to leave the preparation of the baskets to the girls, while we boys will visit the Rock and see that everything there is in order."

The children then separated and went home.

After what seemed a long time to the impatient young folks, the day for the picnic arrived. To their great delight it was clear and sunny. Early in the morning the boys went to the Rock to arrange everything in nice order before it was time for the girls to come.

The Den Rocks was a perfect place for a picnic. It was a huge granite ledge, full of rents and fissures. On the top of the Rock was a large, grassy space, and it was here the Oak-tree grew. On one side the ground sloped gently into a grove of Birch and Maple, while on the other the bare rock descended about fifty feet, forming a perpendicular wall for one side of the open grassy ground at its base. On this grassy space were tumbled large pieces of rock, which had fallen from time to time from the ledge

above. They were covered with brambles and Woodbine, and spotted with brilliant moss. Near the Rock on one side was a forest of large White Pine-trees, and a little distance off was a spring of clear, cool water, round which had been built a wall of stones from the ledge.

There was an opening at the foot of the Rock which was called the Den. It was formed by a large piece which had fallen down and lay leaned up against the main ledge. The Den was large enough for several children to stand up in, and sometimes when the boys were there alone, they built a fire in it and roasted corn. There were cracks in the rock above, through which the smoke would curl up, and the boys at such times called it Robinson Crusoe's oven.

It was not a very hard matter for the boys to prepare the Rock for the picnic. They cleared away all the rubbish, dried leaves, dead branches, and other things which had collected on the top of the Rock, and then brought some branches of Maple and Poplar from the woods. With these they made a very pretty green arbor, in which they placed the chair for Annie. Here she could sit and watch the frolics of her young friends. It was a rude arbor, but when the boys finished their work and looked at it, they thought it was nice enough for a Princess.

"Maggie came last night," said Tom to Johnny, as the boys sat together resting after their work. "Rose wrote for her to come to the picnic, you know."

"How glad Annie will be to see her," said Johnny. "She always encourages Annie by telling her that some day her foot will be well, so that she can walk."

Maggie was Tom's sister. She was several years older than he was. The year before, she had visited her cousin Rose, and had become a general favorite with all the young folks in the village.

By and by girls' voices were heard, and soon the boys saw Rose and Maggie standing at the foot of the steep path which wound up on one side of the Rock. On the other side, the Rock could be reached by a carriage path, but the children almost always chose the steep way. They liked the fun of climbing up on the roots and clinging to the branches to keep from sliding back. Rose and Maggie carried little baskets, and Johnny and Hal swung themselves down the path to bring them up. The girls followed, and soon they were all on the top of the Rock.

"How pretty it is here," said Maggie. "Rose, let us imagine ourselves Fairy Queens, and these boys here shall be our imps in waiting."

The boys took off their caps and freely offered themselves as humble slaves.

Pretty soon the other girls came trooping to the summit of the Rock. They all brought little baskets, which Gilbert received and placed together under a clump of Poplars.

Before long the sound of wheels was heard, and Annie's father soon stopped his carriage just off from the Rock. He lifted Annie out very carefully, and brought her to the chair. The boys carried her shawls and the cricket for her foot, and she was soon comfortably seated.

"Now, darling Annie," said Maggie, coming forward, "I 'm so glad to see you."

"O Maggie, have you come at last?" said Annie, her pale, pretty face beaming with pleasure. Then turning to all the young folks standing round, she added: "How very kind it was of you all to want me with you to-day. This sweet forest air makes me feel almost well. Sometimes this last Winter I have thought I should never live to see the woods again."

"Nonsense, Annie!" said Maggie. "I believe that some time you will be as well as any of us."

"Let us choose Annie for the Queen of the day," said Gilbert.

"O yes!" cried all the children, "Annie shall be Queen. Long live Queen Annie!"

Rose stepped forward and laid a crown of Oak-leaves on Annie's head.

"Now," said Annie, "I will name my attendant sprites. Here Ariel, Cobweb, Silver Star, Lightfoot, Morning Dew—"

"What am I?" said little Frank.

"You are Puck, of course, you little mischief. Go, see

how many flowers you can crush with your tiny foot, or how many poor butterflies you can worry out of life; only, if you should happen to find a big one, don't ride off upon it, and leave us forlorn."

Frank fairly turned a somersault with delight, and scampered off among the Birches. All the others soon followed him, the boys carrying butterfly-nets and the girls little tin boxes and baskets for flowers. Maggie remained with Annie, and when all the rest were gone, she sat down on the grass, and the two girls talked over all that had happened since they parted. Maggie mentioned Annie's lameness. "I do believe," said she, "that if Dr. Grey could see you, he would be able to cure you. He has done so many wonderful things of that kind."

"I am afraid to hope for any such thing," said Annie, "only I cannot help thinking how nice it would be if I could walk just a little, if only enough to save mother from waiting upon me so much."

While the girls were talking, Mr. Benedict came climbing up the rock, carrying his net, and an armful of branches covered with large Oak-leaves. He saw the girls, and came over to where they were sitting.

"I brought these leaves for you to make berry-cups of," said he. "By running the stems through the points of the leaf, you can make very nice cups for the young folks to use at their lunch."

"We will braid some wreaths, too, to put round the plates of cake and bread and butter," said Annie; and, while waiting for the return of the party, the two girls braided long wreaths of the bright, shining leaves.

"The boys are on their way back to the Rock," said Mr. Benedict, "and all clamoring for cakes. They have been all through the woods and down by the river. Here they come."

The boys were all talking and laughing as they came out of the woods. Close behind them came the girls carrying their baskets heaped with flowers.

"Now," said Queen Annie, "the boys may bring the baskets, and the girls shall arrange the table."

When the baskets were brought, Annie commanded the boys to take the pails and bring water from the spring. While they were gone, the girls opened the baskets. They laid pieces of clean paper on the rock, and put the eatables upon them. There were tarts and cakes and thin slices of bread and butter, and sandwiches, and a great basket of berries. Over the contents of the "dishes," as the girls said, they laid covers of paper. Then Maggie brought the Oak-wreaths and twisted them round among the "dishes" until all the girls pronounced the table perfect.

"Don't you think some of your flowers would look pretty, too?" said Annie.

"O yes!" said Jennie Graham, "let 's use some of the flowers!"

The girls all seized bunches of flowers, and the bright blossoms fluttered from their hands over the table until it looked like a garden.

"That will do," said Rose. "Now for the Queen."

She took her hands full of flowers and strewed them all over Annie. They fluttered down, catching in her hair and falling all around her. She sat fairly crowned Queen of the Feast. Then they heard the boys coming back with the pails of water, and Annie told the girls to lift the paper covers that all the tempting things might be displayed to the hungry company.

"Now, girls, that 's too inviting," said Ben. "I move we begin."

"I second the motion," said Hal, as he seized a sandwich and a tart, which he laid on a piece of paper and, kneeling on one knee, offered to the Queen. That was a signal for a general rush. When each had taken his share, they all lay down on the rock, or stood about Annie's seat while they enjoyed the dainties.

"I move a general vote of thanks to the girls," said Ben, when they had finished.

"Three times three for the girls," said Gilbert, and the boys made the forest ring with their shouts.

"As I promised to describe the large butterfly to you,

I have brought my specimen with me," said Mr. Benedict, taking his box from his pocket; "but as the girls are with us to-day, perhaps you would prefer to get up some game to pass the time which remains before we must return home."

"Please to give us a butterfly lesson, Mr. Benedict," said Annie.

"Annie is Queen of the Day. Shall we follow her commands?" said the teacher.

There was a general murmur of assent from both girls and boys, and the teacher commenced.

"Have any of you seen or caught this butterfly?" he asked, as he held up the large, bright gold-colored insect for them all to see.

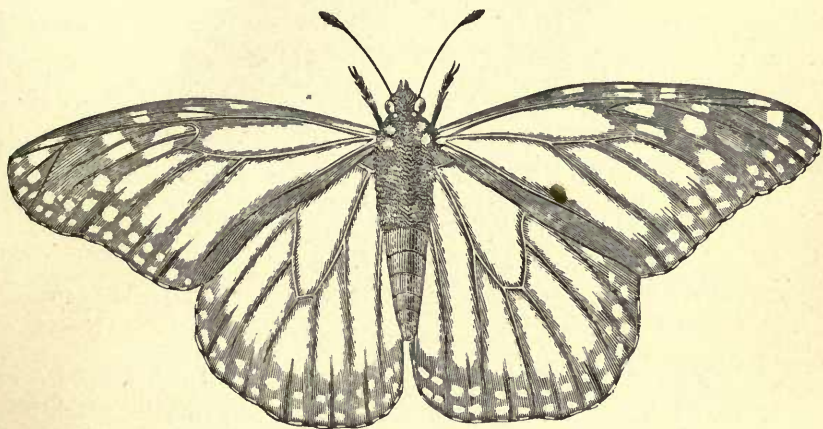
"I have seen them, Sir," said Hal, "but not this Summer. I have caught them, too, but they were so strong they always got away from me."

"Was the butterfly stronger than you were, Hal?" asked little Frank.

"Why, Frank, I did n't hold it as tight as I would a squirrel, which has only soft fur, instead of delicate brittle wings."

"Hal is right," said the teacher. "I know of no butterfly that takes such strong hold of one's fingers with his feet as the Archippus. It is so strong that, without ether, it is disagreeable work to subdue it. The Archippus is the

largest butterfly we have. Its wings expand from three to four and a half inches. It is not so gaudy in color as some others are. The wings are tawny orange, and very



Archippus.

beautifully bordered with black dotted with white. The wings are crossed by fine black veins, and on the tip of the fore wing are several yellow and white spots extending up on to the front border. The under side of the wings is of a deep yellow, bordered and veined the same as the upper side. The head and thorax are black spotted with white, and the antennæ have a long knob. The males of the Archippus are marked by an elevated black spot on one of the veins near the centre of the hind wing.

This large butterfly belongs to the genus *Danais*. It is fond of hovering round *Asclepias*, the common Silk-weed, and deposits its eggs on this plant. It appears about the middle of July and may be found all through the month of September. It is very strong on the wing, and you will often have a long chase after it; but fine specimens are worthy of pursuit. I hope some one of you will succeed in catching one."

"See here," said little Frank, coming eagerly forward and handing to the teacher a butterfly almost the same as the *Archippus*, only much smaller.

"Why, Frank, you are a smart boy. Where did you find that?"

"Flying about in the great Willow down by the river. I waited there a long time for it to come within reach of my net. Is n't it just like the one you have been talking about?"

"No, it is a little different, and I will show you in what respects. It is so much like the *Archippus* that any of you might have taken it for that. But this is the *Nymphalis Disippe*, and it belongs to a different genus. In the caterpillar and chrysalis state it is entirely different. You see the butterflies are exactly the same in color and in the marking, except that this one has a band across the hind wing, above the border. Its wings expand a little over three inches. The genus *Nymphalis*, to which

this butterfly belongs, are all four-footed. The edges of the wings are scalloped instead of being notched or tailed, and there is no elevated spot on the hind wing of the



Nymphalis Disippe.

male. This Disippe butterfly may be found on the wing from the middle of July until October. It deposits its eggs on Poplars and Willows, where you will often find the brown caterpillar creeping about.

“There is one more of this genus which we will take for our next lesson. It is very beautiful and entirely different in color from the one we have just described. It is not very common, but it will be on the wing about this time, and I think you will find it if you hunt carefully about the borders of some woodland. It is particularly fond of the Scrub-Oak.

“Before we meet again I wish you would try to find

some of the chrysalids we talked about at the last lesson. Frank, they will interest you more than the caterpillars."

"Yes, Sir, they will. But where shall I look for them?" said Frank.

"O, in different places. Sometimes you will find them attached to old dead branches by a silken thread, or hid away in snug places round fences and stone walls. The chrysalids of the moths, that we shall study about when we have finished the butterflies, are often found in the ground. The *Philodice* chrysalis you will find in Clover fields^d suspended to the stalks of Clover or spires of grass. It is of a straw color."

"I am going to hunt for some of them," said Frank, "and I know a girl," he added, laughing and looking toward the Queen, "who is making a collection. She has a whole box full."

"Do you mean Annie?" asked Mr. Benedict, turning towards her.

"I have a few," said Annie, "that Johnny and Hal have brought me."

"I found some of them," said Johnny, "when I turned up the earth in making Annie's garden in the Spring. We had not commenced studying then, but they were so pretty and shining I carried them in for her to keep."

"Have any butterflies come out yet?" asked the teacher.

"No, Sir," said Annie. Then she added timidly, "If I

let Johnny take them to school would you please tell him what they are and how I am to take care of them?"

"You need not do that, Annie," said he. "I will come myself and see them. If you will carry all you find to Annie," said he, addressing the class, "I will tell her what they are and show her how to preserve them."

Annie's father and mother had been waiting some time for Mr. Benedict to finish his instruction, before they carried the young girl to the carriage. Now the girls all gathered around Annie and kissed her. She seemed to feel so much better for the day in the woods, that they all resolved that she should be there with them again before long.

It was now sunset, and the young folks gathered up their baskets and walked slowly toward the village.

CHAPTER XI.

AN EVENING WITH ANNIE WEBB.



HE evening before Maggie's return to the city she went with Rose, Hal, and Tom to bid Annie good by.

"Maggie," said Tom, as they walked down the hill, "don't you tell father how stout and brown I have grown, for I'm afraid he will think I am well enough to go back to the old, dry school again."

On hearing this speech, Hal gave a loud laugh.

"What are you laughing at, Sir?" said Tom.

"O, I was only remembering the doleful face you brought out under the Elm the first morning after you came here. You thought the country was horrible, and now you find the old, dry schools are in the city."

"Don't you dare to laugh at me," said Tom. "I have been ashamed of that morning ever since. But we do have some nice things in the city, and next Winter you must come and see for yourself. You have nothing here then."

"Nothing? O Tom! You ought to see Johnny and me sliding down the side of the Mountain some day when the crust is firm."

"O well, we slide down hill in the city, and skate, too, although our sliding places are not as grand as the Mountain."

"Then sometimes we have a long, drifting snow-storm," said Hal, "and when it is over we shovel paths and build snow-forts and have grand snowball battles. Then is when we have our real fun. The Summer sports, butterfly-hunting and the like, are nothing but girls' play."

"I don't think it was girls' play yesterday, Hal," said Maggie, "when you were chasing that Archippus butterfly. Rose and I were sitting under the trees, and we could see you rolling over walls and stumbling over rocks, and then when you finally came back to the house you were spattered all over with mud."

"I caught the Archippus, though," said Hal, "so the mud did n't matter. It was rough work, to be sure."

Before they reached Mr. Webb's house they met Mr. Benedict, who was also going to see Annie.

"I have lost the moths which came out of these small straw-colored cocoons," said Annie, when Mr. Benedict inquired about the chrysalids. "I did not think it was time for any of them to come out, so I left the box cover off one day and away they flew."

"It will be safer to keep your box closed," said the teacher, "for they may break the doors of their prison-house at any time. I am glad your box is large; it gives

the insects room to expand their wings. These you have lost were the moths of the Lackey caterpillar. Their wings are reddish-brown, crossed by two dingy white lines. You will find them every evening now, flying about your room, if you leave your window open after the lights are brought in. They are the moths which leave their eggs on the apple-trees. The caterpillars are often very numerous, and, unless destroyed by the farmer, they prove a great injury to the fruit.

"That delicate gray chrysalis contains the Vanessa Comma butterfly. Where did you get it?"

"Johnny found it on the Hop-vine back of the house," replied Annie, "and this dark-brown one Tom brought me yesterday. He took it from an old branch of a Willow."

"That is the chrysalis of the Vanessa Antiopa, which the boys will remember we had specimens of in the early Spring," said Mr. Benedict. "That chrysalis," pointing to one about two inches long, of a rich brown color, and covered with little points, "is as valuable as any you have. It contains the large yellow moth called *Dryocampa Imperialis*. I am afraid it is dead, for it is late in the season for it to come out. It generally appears by the first of July."

"Johnny dug that chrysalis out of the ground last Spring," said Annie.

Just then Johnny came into the room with his butterfly

box in his hand. He opened it and showed its gorgeous contents. "It was so sunny to-day," said he, "that the fields were full of butterflies. I never saw so many before. Shall I bring them all to the class to-morrow?"

"Yes, bring them all," said the teacher, "and I will tell you about as many as I can."

He wished Annie good evening, and went away ; but the young folks sat a long time together, for Annie was very unwilling to bid her friend good by. Before Maggie left she had made Mr. Webb promise to send for Dr. Grey to examine Annie's foot, and as she was going away she looked back to Annie and said : "Now keep up a good heart. I shall come again in the Autumn when you have the Festival, and I expect to find you walking about like all the rest of us."

"She is the dearest girl in the world," said Annie that night to her mother. "I think she really believes I shall get well."

"We all hope so, too, my darling," said her mother, as she kissed her good night.

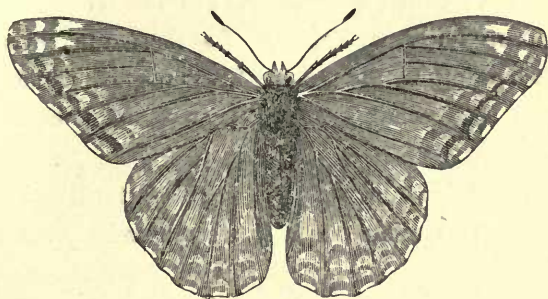
CHAPTER XII.

JULY BUTTERFLIES.



HIS bright warm month of July is the gala-day for the butterfly," said Mr. Benedict, as he opened the class on the evening following Maggie's departure. "You boys have been very industrious with your nets," he added, as he looked at his table, which was quite covered with boxes of specimens. "You have found valuable specimens of many large varieties. Most of these butterflies have just left the chrysalis, their wings are perfect and very fresh in color. At the picnic I promised to tell you about the other butterfly belonging to the genus *Nymphalis*. I was afraid no one would find a specimen, so I brought one from my Cabinet; but I see Ben has found one much finer than mine. I shall use his to illustrate my description. It is called the *Nymphalis Ephestion*. Although belonging to the same genus as the *Disippe* butterfly, it is entirely different in color. The chrysalids of both butterflies are precisely the same in appearance; but while the *Disippe* rises from its dry shell with a gorgeous dress of orange and black, the more modest *Ephestion* is clothed in blue-black. A beautiful tint of

glossy blue is spread over the hind wings. The wings are scalloped with a white edge. The hind margins are ornamented with three black lines. Near the edge of the



Nymphalis Ephetion.

fore wing are some little white dots, and within the border some spots of an orange color. These orange spots are often very faint on the upper side of the wing, but on the under side you can see them very distinctly. The Ephetion butterfly expands from three to four inches. You will find it on the wing any time in July or August, but it is not very common.

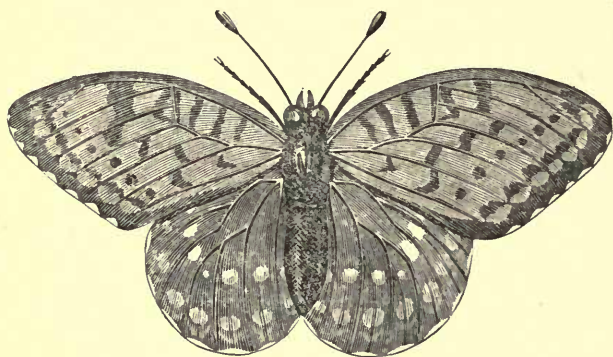
"Here are four different specimens of the genus *Argynnis*," said the teacher; but just then the door opened and little Frank came tripping in. "Well, Frank, where have you been? We have half finished our lesson without you."

"We had supper so late," said Frank, "that I could n't

come any earlier. My mamma said I would better not come at all, but I had this butterfly I wanted to bring you."

"This is a Hunter's butterfly, Frank. It is very early in the season for it to appear. As there are several butterflies belonging to the genus *Argynnis*, of which I wish to tell you this evening, I will keep Frank's butterfly for the next lesson.

"The under side of the wings of butterflies belonging to the genus *Argynnis* are almost invariably ornamented



Argynnis Idalia.

with silvery spots. This butterfly, which is called *Argynnis Idalia*, has a row of silvery crescent-shaped spots, just within the black margin on the under side of the wings." He turned the butterfly so that all the boys could see the

under side. "The upper side of this butterfly is very beautiful. Its fore wings, which expand more than three inches, are of a dusky orange, spotted with black. The black border on the edge is ornamented on the inside with points and on the outside by a row of white spots. The hind wings are of a beautiful blue-black, which shows very brilliant in the sunlight. On the hind border are two rows of light fawn-colored spots. In the males the outer row of spots is the same color as the fore wings. This butterfly is found in grass fields and among bushes by the roadside, all through July and August."

"I think this butterfly with blue-black wings is the handsomest one the teacher has told us about," said Tom, as Mr. Benedict stopped to give the boys a little recess.

"Which one do you mean?" asked Hal. "The Ephes-tion and Idalia both have blue-black wings."

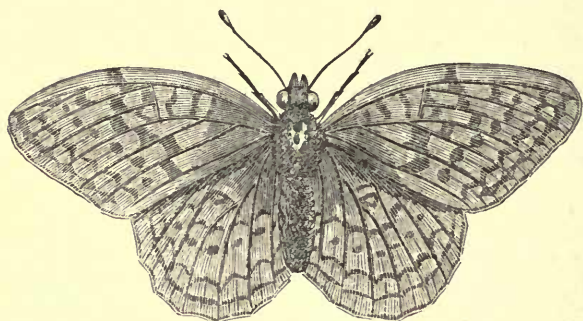
"I mean the Idalia," replied Tom, "which has only the hind wings black. This is the first butterfly I ever saw with wings of different colors. Only see how pretty the orange and black look together."

The boys were all gathered round Mr. Benedict's table, for during recess he liked to have them come and examine the butterflies and ask him questions about them.

"Only see the under side," said Hal, taking up the Idalia butterfly. "How beautiful the silvery spots show on that deep black."

"I caught some butterflies like this in my hat last Summer," said Johnny. "As I did n't care to keep them then, I carried the wings to Annie and she arranged them with some pressed flowers in her Herbarium."

After about ten minutes, the teacher called the boys to take their seats.



Argynnis Aphrodite.

"Here," said he, "is a large butterfly called *Argynnis Aphrodite*. The wings are tawny orange and shaded very dark near the body. The male is much lighter in color than the female. There is a fine black line near the hind margin of the wings, within which is a row of black crescent-shaped spots. The remainder of the wings is spotted irregularly with black. The under side of the hind wings is covered with bright silvery spots, peculiar to this genus. On the under side of the fore wings there are only a few silvery spots, and these are on the front margin. The

Aphrodite butterfly expands over three inches. It first appears in the month of July, and flies about in the meadows all through August. By the first of September you will find it faded and weak, trying in vain to raise itself above the low shrubs growing close to the ground. You will not find any more butterflies as large as this, except some of the varieties I have already described to you, many of which linger round the fields all through the month of August. The genus *Cynthia*, to which Frank's Hunter's butterfly belongs, possesses some of very good size, but none as large as the Aphrodite butterfly.

"Here are two smaller butterflies belonging to the genus *Argynnis*. They resemble each other so closely that without special attention you cannot distinguish them apart. This one is the *Argynnis Myrina*. You see it is very small, expanding less than two inches, but the same in color as the Aphrodite butterfly I have just described, the wings being of tawny orange, and marked in the same manner, except that on the hind wings of the *Myrina* butterfly are some black lines. The under side of the wings are paler in color, but marked with the silvery spots arranged in rows. There is a row of black dots between the two outer rows of silver. This little butterfly may be found in low grounds all through the Summer. There are two broods. The first leaves the chrysalis about the first of June, and some of these are still hovering about when the

second brood begins to make its appearance, which is about the first of August. This other small butterfly is called *Argynnis Bellona*. It closely resembles the *Myrina* butterfly in shape and color. The *Bellona*, however, is a shade richer in color, and the under side of the wings is of a purplish tint. The chief distinction, and indeed the only one which can be positively determined, is that the *Bellona* butterfly lacks the silvery spots on the under side of the wings. The antennæ of the genus *Argynnis* spread apart, and the knobs are thick and short. There are also some peculiarities in the caterpillar which distinguish this species, but I don't think any of you will be interested to learn about them at present. I know our young friend Frank will not.

"Here is one more small butterfly which Johnny Webb has brought in. It is not of the genus of which I have been speaking, but, as I do not think you will find any more of the genus to which this belongs, I will add it to the lesson to-day.

"Annie caught that butterfly, Sir," said Johnny. "She was sitting in her seat in the garden and it lighted on some flowers which were lying on the seat. She caught it in her handkerchief."

"You must remember the name of it and tell Annie when you go home," said the teacher. "It is the *Melitæa Pharos*, and is the only one of the genus *Melitæa* which

is common. The wings are dusky orange. There is a broad black border on the hind wing, with a wavy line of black just inside. Inside of this is a row of fine black dots. The rest of the wing is marked by narrow black lines and blotches. Underneath the wings are of a buff color, and marked with black lines and blotches the same as above. This little butterfly expands one inch and a half."



Melitæa Pharos.

The teacher here finished his lecture, and the boys all put away their pencils and note-books, and passed quietly out of the school-house.

CHAPTER XIII.

THE HAY-FIELD.



NE Saturday morning Rose, Hal, and Tom were sitting out under the Elm talking about the Butterfly Festival, which was to take place in the Autumn. Maggie was coming up from the city to go with them, and after it was all over Tom was to return home with his sister.

There were still two months before they would have the Festival, but the young folks had already commenced laying many plans to be carried out when the grand frolic took place.

"We ought to have a Queen butterfly," said Rose, "and the game should be for you boys to try to capture her."

"We must have grand new nets for that," said Tom. "It would never do to throw the old nets we have dragged through mud and briars all Summer over the head of the Queen."

"Perhaps you won't catch her with a net at all," said Rose.

"What shall we catch her with? Come, Rose, tell us," said Hal.

Rose shook her head and looked very mysterious. The

boys knew that the girls had some secret plans about the Festival, so they tried their best to tease Rose to tell about them. Just then they saw a bristling array of rakes and pitchforks coming up the hill, and soon the whole butterfly class appeared, each boy carrying a rake or a pitchfork over his shoulder.

"Hallo, boys," said Hal, springing forward to meet them, "where are you bound?"

"You told us that you and Tom were going into the hay-field this morning," said Ben Wait, "so we thought you ought not to have the frolic all by yourselves."

"I've brought my butterfly net," said little Frank. "I'm going to catch ever so many butterflies while the rest make hay."

"Take care that some butterfly does not catch you, Master Puck," said Rose; but Frank was already over the wall and capering off across the field.

"You are just in time, boys," said Hal; "there is grass enough down for us all to work at, and by this time it ought to be spread out to dry."

They all started off towards the field, Tom and Hal stopping at the barn on the way for their pitchforks. As they were going down the lane Rose called after them: "When you are tired, boys, go to the Elm in the centre of the lot, and there you will find something to rest you."

"That's just like Rose," said Ben Wait; "she always knows what is good for boys."

When they reached the field, they saw a number of men swinging their scythes through the tall grass, which was still wet with the morning dew. Hal and his party soon were hard at work, spreading out the new-mown hay so that it would catch the hot rays of the sun. Their merry voices rang through the air as they called back and forth to each other across the field. Meanwhile little Frank, with his blue gauze net flying over his shoulder, was jumping and running about all over the field, often stopping to watch the yellow *Philodice* butterfly at play. The *Philodice* were very numerous now, and they were flying in pairs round and round over the sweet-scented hay.

At last Tom stopped work and leaned on the handle of his pitchfork. He was not quite so robust as the country boys, and the work in the hot Summer sun was harder than anything he had been accustomed to. But all the boys began to feel tired, for they had not been playing, but working with a will, each one trying to prove himself the smartest man. They were all quite ready to follow Hal, who proposed that they should stack their pitchforks and go to the Elm. Here they found some fairy had placed a basket of gingerbread and sandwiches and a pail of iced molasses and water. "Real haymaker's fare," said Ben, as he seized a huge slice of gingerbread and proceeded to dispose of it. Little Frank saw them sitting under the tree, and came up for his share. He held something very carefully in his net.

"It is not a butterfly," said he, as the boys gathered round to look.

"O no," said many voices at once, "it is nothing but a Devil's Darning-needle." And they all laughed at Frank for throwing his net over one of those things.

"It is almost as pretty as a butterfly," said Frank, "and I am going to take it to the teacher to-night." He took out his little bottle of ether, and, with Tom's help, he soon subdued the insect and secured it to a cork in his box. It was very pretty, as Frank had said, with its long, slender, black body and four gauzy wings.

When the boys had seated themselves round the tree, and were eating their luncheon, Hal asked what butterflies they had for the class that night, adding that he had none.

"There is my Hunter's butterfly I carried last time, and then the Darning-needle," said Frank.

"The Darning-needle is very important of course," said Ben. "I am afraid if we depend upon you, Frankie, to supply us with specimens, Mr. Benedict might as well give up the class. Fortunately I have some new ones I caught yesterday after school."

Gilbert had some too, so they concluded that would be enough.

"There is Rose coming down the lane," said Ben; "let's all go and meet her." The boys gathered up the remains of their luncheon and started towards the house.

"Johnny," said Rose, as the boys came up to her, "I have just returned from seeing Annie. Dr. Grey has come to see her to-day, and I thought you would like to know what he says."

The boys stood very silent, until finally Johnny spoke: "What does the Doctor say about her foot?" he asked.

"He thinks—he hopes," answered Rose, "that he can cure her. She will have to keep very quiet in her chamber for a good many weeks, he says, but he thinks she will be able to walk, perhaps not as well as you can, Johnny, but still without her crutch."

Johnny's face was flushed and his eyes shone with excitement, as he listened to what Rose was saying about his sister. He had never seen Annie walk in all his life, except very slowly and leaning on her crutches, for he was not so old as she was, and the injury which had made her such a patient sufferer for so many years she had received before he was born; and now the Doctor said that perhaps within a few weeks she would walk round the house, and, it might be, out into the garden, without even leaning on his arm.

"I think I'd better go home, boys," said he; "perhaps I can help about something."

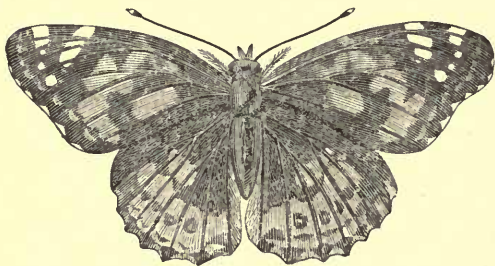
All the boys started at once to go with him. When they reached Mr. Webb's house, everything was very quiet, and all they could learn was that the Doctor and Annie's

mother were in Annie's room with the young girl, but that nothing could be decided as yet.

That evening at the butterfly class the boys were all watching for Johnny, and when he appeared they all began to question him. He had not much to tell them. The Doctor had performed an operation on Annie's foot, and had gone back to the city. He had left very strict orders to keep Annie quiet on her bed, and in a few days he was coming again, when he would be able to say with more confidence what would be the result. Mr. Benedict was much interested in Annie, but he saw it would be better for the boys to draw their thoughts to another subject. "Come, boys," said he, "we must examine our specimens for the evening." He looked at what had been brought in, and then commenced his lecture.

"At our last meeting I told you about four varieties of the genus *Argynnis*. There are many more of that class in which you would be interested, and if any of you bring in another variety, which I don't think very likely, I will tell you about it. At present, however, I shall pass to the genus *Cynthia*, to which Frank's Hunter's butterfly belongs. This genus is distinguished by the evenness of the edges of the wings. On the fore wings there is a slight indentation, and they are also slightly elongated toward the front border. The hind wings are never indented nor tailed. In the *Cynthia Huntera*, or Hunter's butterfly,

the fore wings are black, spotted with white toward the tips and orange toward the shoulders. Round the black



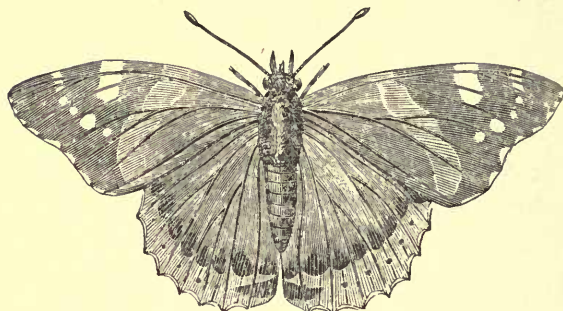
Cynthia Huntera.

border of the hind wings are some small crescent-shaped black spots, inside of which is a row of black dots. The under side of the wings of the *Cynthia Huntera* are more beautiful than those of any other butterfly we have examined. The hind wings are very delicately marbled with drab and white. On the margin are delicate lines of drab and white, and just inside four purplish spots. On the male there are only two of these spots, and they are much larger than those on the female and edged with white. The fore wings are beautifully spotted with pink, black and white on a drab ground. This specimen of Frank's is very perfect, and bright in color, as it has only just now come forth from the chrysalis. A few weeks later you will find these butterflies very common. They are not large, expanding at the most only two and a half

inches, but they are so very pretty that they well repay the trouble of a chase.

“Here are some more specimens of another butterfly belonging to this genus. It is the *Cynthia Cardui*, commonly called Thistle butterfly, because its caterpillar lives upon the leaves of that plant. You will find it all through the months of July and August hovering about by the roadside. It loves the blossoms of the Thistle, but sucks honey from many other flowers as well. You see it is not quite so large as the Hunter’s butterfly, and not so beautifully colored. The body is thick and clumsy. The wings are tawny orange spotted with black and white, and if you look very closely you will see they have a faint rose-tint. The under side of the hind wings is very much like that of the Hunter’s butterfly. It is marbled in the same manner, but the marking varies a little. On the Thistle butterfly there is an irregular-shaped white spot near the centre of the wing, and a row of dots on the border.

“Gilbert has brought in one other variety of the genus *Cynthia*. It is called *Cynthia Atalanta*. You see it is a little larger than the two I have just described. It expands about three inches. The wings of the *Atalanta* butterfly are black. At the tip of the fore wings are a few little white spots. There is a band of orange across the centre of the fore wing, which extends round on to the hind wing forming its margin. When the wings of

*Cynthia Atalanta.*

this butterfly are opened as Gilbert has arranged his specimen, you see that this orange band on all four wings forms an almost perfect circle. On the orange margin of the hind wings is a row of black dots ; two of these dots nearest to the hind angle have a blue centre. The Atalanta butterfly is commonly found hovering over beds of the Nettle, and the leaves of this plant receive its eggs. There are two broods in the course of the season, the first coming out early in July and the second the last of August. This butterfly is not considered a native American, but is supposed to have been introduced from Europe together with the Nettle, which was originally a foreign plant, although it is now very common and may be found growing round nearly every old country home. A Nettle plant is not a very tender nursery for a young caterpillar to be born in, and no doubt Frank would be glad to hear

that the prickles killed it, before it was a day old. But Nature takes better care of her young children than to allow such things to happen. The young caterpillar is curiously provided with long spines, which project all over its body and entirely protect it from the sharp prickles of the Nettle.

"For our next lesson we will take some more specimens of the genus *Vanessa*. You remember the *Antiopa*, the first butterfly I described to you last Spring, belonged to this genus, and there are two more that ought by this time to be on the wing. Very likely some of you will find specimens before we meet again."

Mr. Benedict was about to dismiss the class, when little Frank, who had been waiting very impatiently for the teacher to stop, climbed down from his seat and came towards Mr. Benedict's table. He had not placed his specimen with the others, because he wanted to give it to Mr. Benedict himself.

"Well, what have you now, my little fellow?" asked the teacher.

"That 's what I want you to tell me. All the boys laughed at me for catching it, and said it was only a Devil's Darning-needle."

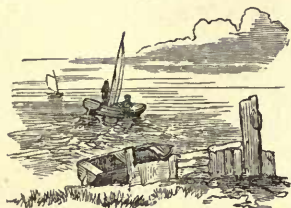
A loud laugh rang through the class at Frank's statement, in which the teacher joined.

"That is the common name of this insect, Frank," said

he. "It is one variety of Dragon-Fly. Some of these Dragon-Flies are very delicate and beautiful, and I think you would all be interested to add a few to your collection. Some day before vacation I would like to go with you on a boating excursion. Dragon-Flies always live around ponds and damp places, and in the marshy borders of World's End Pond we shall be sure to capture some fine specimens."

CHAPTER XIV.

HAL'S MISHAPS IN THE WOODS.



"It will be real jolly to go on a boating frolic with Mr. Benedict," said Hal, as the boys were leaving the school-house.

"If I had not carried him my Darning-needle," said Frank, "he never would have thought about going. I wish he would go next week. I want to catch some more Dragon-Flies, they are so—"

"So what?" interrupted Ben Wait. "I don't think they are half so pretty as butterflies. Don't you see the things have no color, except black and white? I used to think that they could sting worse than bees with that horrid long tail."

"You need not go to the boating party then," said Frank.

"Yes, I will. I like the boating too well to stay at home."

"We must be almost through with butterflies," said Hal. "I don't remember seeing many more kinds than we have caught."

"Just as if you knew anything about it," said Ben.

"I do," said Hal. "I always used to catch butterflies in my hat, only I never kept them before, and I know we have had most all the kinds at the class. There are some little dark butterflies I have seen in the woods that we have not had yet. Mr. Benedict will want those of course."

One day, not long after this conversation took place, Hal and Tom started out into the woods to look for some of the little dark butterflies of which Hal had spoken. The woods were deliciously cool and the boys lay down under the trees for a long time before looking about for their butterflies. It was so pleasant to watch the stray bits of sunlight which came gleaming down here and there between the branches, falling in bright bits of light on clusters of delicate, wavy ferns and beds of rich moss.

"Well, Tom," said Hal, springing up at length, "we sha'n't accomplish much in this way. I want to fill my box with the little brownies before I go home."

They started off, one towards the mountain and the other into the Birches, and agreed to meet under the Elm at home. Tom was very successful that afternoon. He had grown quite familiar with the secret of creeping safely through bushes and briers, and he could tumble over a stone wall as gracefully as any real country boy; so he went easily about in the thickets on the mountain, and long before sunset a brownie was mounted on every cork

in his box. As he approached the house he saw Hal sitting under the Elm. Hal was very much out of temper. There was no end to his bad luck. He had encountered an angry bull, and very narrowly escaped him. Then just as he was plunging forward to throw his net over a rare specimen, his foot got entangled in some briars and over he went, scratching his hands and breaking the staff of his net as he fell. His box flew out of his hand, the cover rolled off, and several brownies he had already captured were loosened from the pins and scattered broken among the brambles.

"I will give up beat this time, Tom," said he. "Now let's see what you have caught."

Tom showed his handsome collection.

"You have worked like an old naturalist," said Hal, "while I, like a clumsy fellow, have done nothing but tumble about among the bushes. Come along," he added, "I must go and cut a new stick for my net."

When they started for the next class-meeting, Tom took his box of brownies, although the teacher had said the lesson would be on the genus Vanessa.

"Have the boys caught any Vanessas?" asked Tom.

"Yes," replied Hal, "Ben and some of the other fellows had some to-day."

When the boys reached the school-house they found Mr. Benedict was just commencing. As they went in he was

holding up a butterfly before the class. It expanded about two inches and a half.



Semicolon.

“This belongs to the genus *Vanessa*,” said he, “and is commonly called the Semicolon butterfly, on account of the resemblance of the golden spot on the under side of each hind wing to a semicolon. The wings are tawny orange, shaded very dark near the body. They are spotted all over with brown. On the margin is a regular line of brown spots, inside of which, on the hind wings, is a row of lighter-colored spots. The under side is marbled with different shades of gray. In the centre of the fore wing is a white spot, and on the hind wing the gold-colored semicolon. A few specimens of this butterfly are sometimes found in May, and by some naturalists it is supposed

to live through the Winter. This is very probable, as those seen on the wing in that month have, as a general thing, faded and torn wings. The time for taking them for your collection is from the last of July till October.

“Another species of this genus is the *Vanessa Comma*. Gilbert has brought in several very fine specimens. You see,” said Mr. Benedict, as he held up Gilbert’s box before the class, “that the *Comma* butterfly is not quite so large as the *Semicolon*. It is very rarely found expanding more than two inches. The wings are dull orange, shaded on the margin with a purple tint. They are spotted with brown, and along the margin is a row of buff-colored dots. The edges of the fore wings are deeply notched, and the hind wings are tailed. Underneath, the wings are marbled with gray, and in the middle of the under side of each hind wing is a silvery spot shaped like a comma. A few poor specimens of the *Comma* butterfly are, like the *Semicolon*, often seen flying about in May, but the time when they are to be found fresh in color and perfect for a cabinet, is during the month of August and September.

“There is one more of this genus which appears at the same season as the others. You have not found any specimens of it as yet, but I will describe it, so that you may know its appearance. It expands over two inches, and is very showy and handsome. The wings are of a rich velvety black, and there is a broad orange band extending

across both pairs of wings near the margin. On the hind wings there is a row of blue crescent-shaped spots between this band and the edge. On the front edge of the fore wings are two large orange spots. The under side of the wings is dark brown, with a band of a lighter shade of brown near the margin. The name of this gay little butterfly is *Vanessa Milberti* or Milbert's butterfly.



Vanessa Milberti.

"I shall tell you about only two more kinds of butterflies this Summer. Then we shall have examined, not of course all kinds of butterflies, but nearly all the varieties common in New England. The two remaining varieties are the Hipparchians and Skippers."

Just then Tom, seeing that Mr. Benedict was about to dismiss the class, brought his box of brownies to the teacher.

"These are Hipparchians," said Mr. Benedict. He held up the box for all the boys to see, and told them that

before the next class-meeting he would like to have them hunt in the woods and shady places for more varieties. He said they would devote the next lesson to Hipparchians and the last to Skippers. After that they would have the boating excursion.

"What did you say about Skippers, Sir?" said Frank. "Are they butterflies?"

"Yes, they are butterflies, but very small ones," replied the teacher.

"There goes a Skipper, now. Catch him, catch him," said Gilbert, as the boys were leaving the school-house; and, bounding after Frank, he seized him in his arms, and, placing him astride of his broad shoulders, galloped off up the street.

CHAPTER XV.

THE LITTLE WOOD-BROWNIES.

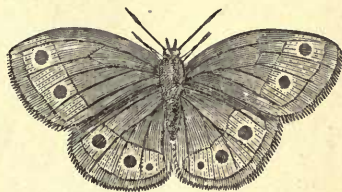


BEFORE the next meeting the boys searched faithfully through all the woods and thickets, and many a poor brownie yielded up its little life and took its place on a cork.

"I always call these butterflies Quakers," said the teacher, as he commenced his lecture. "They do not appear in the brilliant colors worn by butterflies that love flowers and sunshine, but, dressed in Quaker drab, they seek the quiet and retirement of the woods, where they flit about in graceful circles over the shady beds of ferns and woodland grasses. These Quakers belong to the genus *Hipparchia*. They possess several distinguishing features, the most prominent of which is the enlargement of the veins of the fore wings near the shoulder. I shall describe some of the different varieties."

There the teacher stopped, and selected a box from those on his table, which he held up before the boys. "I think," said he, "that this little butterfly is more beautiful than any other of the Quakers. It is called *Hipparchia Eurytris*. It is found in the thick woods where the air is damp and cool. It always seeks the shade rather than the sunshine,

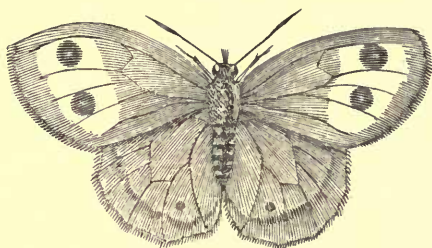
and flutters low among the bushes, as if to hide from even the daylight. It is especially the Quaker butterfly, for the color of its wings is a fine Quaker drab, shaded a little darker toward the shoulders. Near the margin of all the wings is a band a shade lighter, and on the band, on each wing, are two eye-like black spots surrounded by a ring of very pale drab. The under side is precisely like the upper. The wings of this little butterfly are very delicate and fine in texture, and so easily soiled or broken as to make it difficult to capture without injury. The Eurytris butterfly is found in July, and sometimes as late as the last of August. It expands about one inch and a half.



Hipparchia Eurytris.

“The largest of these butterflies is the *Hipparchia Alope*. Its wings expand two inches, and even larger specimens have been captured. I have one in my collection measuring over two inches and a half; but you have found none over the usual size. The wings are all dull brown. Across the centre of the fore wings is a broad ochre-yellow band, on which are two black spots, with a light blue centre. The hind wings are scalloped and ornamented with a row of black dots round the margin, outside of which is a band of lighter brown than the rest of the wing. The under

side of the wings is pale brown, crossed by lines of a darker shade. In the male Alope there are rarely any black dots on the hind wings. The Alope butterfly is



Hipparchia Alope.

found all through July and August, and often as late as the last of September. It does not seek the dense shade so much as the Eurytris butterfly, but loves to hover where the sunlight, streaming through the leaves, warms and dries the air. Sometimes late in the season I have seen it venture out from its sylvan hiding-place into the open air of the orchards.

“The other varieties of this butterfly are not common. The Hipparchia Semidia, or Mountain butterfly is found in the mountainous regions of New England, but I have never known it to visit the more level country. It has the same general character as the two we have just described, wings grayish brown and spotted with a lighter shade of the same color. The texture of its wings is so very delicate that it is almost impossible to procure a perfect specimen.

"There is another variety of *Hipparchia* which has been named *Boisduvallii*, in honor of the celebrated naturalist of that name. It also is a lover of mountainous regions. In appearance it is not essentially different from the *Eurytris*, except that it is a little larger and has more spots on the wings. There are a few other varieties, but they are not often met with. They resemble those we have already described, and differ but slightly in size and color. The *Hipparchia Nephele*, or Cloud butterfly, is also a beautiful variety. Its wings are of a grayish brown color, the fore wings bordered with a paler colored band, on which are two eye-like spots. The under side is marbled with shades of brown. Its wings expand about two inches.

"There are many other kinds of *Hipparchians*, but it would be impossible for me to make you familiar with the whole family."

The teacher, having finished his lecture, dismissed the boys; but they all remained for a while, talking about the Festival and the boating excursion, and about Annie.

"We won't have our Festival until Annie can go," said Gilbert.

"I did n't try to catch one of these little dull butterflies," said Frank; "but now the teacher calls them Quakers I like them better."

"Ah, Frank likes Quakers," said Ben Wait, laughing.

"You need n't laugh, Ben, for I don't think I do.

When my little Quaker cousin comes to see me I 'm sure I don't like her, for she gets all my books and playthings out of place. Then I get mad and call her Quaker Mary ; but she never cries when I tease her, she only smiles a little."

"O, Mary is too old to care when such a hop-o-my-thumb as you are teases her," said Joe Dane, a very roguish fellow, who never said much, but always listened with a twinkle in his eye to all the other boys' fun.

"You like Mary, Joe. You came down and played with her every day when she was here last Spring," said Frank.

Now the laugh all turned on Joe, and all the boys at once began, "Quaker, Quaker, Joe 's a Quaker."

"My mother is a Quaker, anyway," said Joe ; "and Quakers often come to see her, and I like them."

"Cousin Mary is coming to our Festival," said Frank ; "but the shy little thing would not be Queen, so nobody will have the fun of catching her."

"I say," said Hal, "our Queen must have some Maids of Honor. We shall need more than just one Queen, for I know I should be mad at the boy who caught her if there was nothing left."

"The girls will arrange that to suit themselves," said Gilbert, "and we must be content with what they give us."

The boys were never tired of talking about the Festival.

They almost forgot the boating on the pond, which was to take place first. But to Frank this last was an occasion of great importance, partly because his Darning-needle, as he called it, had been the means of bringing it about. "One more lesson, and then hurrah for the Dragon-Flies!" said he, as the boys parted for the night.

CHAPTER XVI.

SKIPPERS.

“KIPPERS! What a funny name for butterflies!” said Tom, as he and Hal were getting ready for the next class-meeting. “I should think grasshoppers might well be called so, but I ’m sure butterflies never skip.”

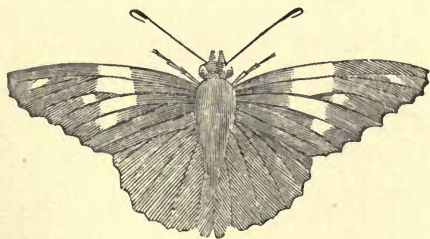
“If you had gone out with me yesterday, instead of sleeping under the Elm, you would not wonder about the name,” replied Hal; “the things know how to skip away from one, anyway, even if they don’t fly very high.”

On reaching the class-room they found the teacher had not arrived, but all the boys were gathered round Johnny. Johnny had great news to tell. Dr. Grey had been to see Annie again, and had said she was much, much better than he had hoped. He promised her that in a few weeks she should walk without assistance. While the boys were still talking eagerly, Mr. Benedict came in, and listened to what they had to tell him about their young friend. They then took their seats, and, after arranging the specimens they had brought in, the teacher commenced.

“I shall give but one lesson about all these butterflies,

because, as they are easily described as a class, it would be useless and indeed almost impossible to describe each variety. I shall mention a few of the kinds most common in this vicinity. There are two kinds of butterflies, the True butterfly, which when lighted always holds its wings erect, and the Skipper, that only erects the fore wings when at rest. These Skippers are very small insects, but their body is very robust, and they fly with great rapidity and strength, not moving in graceful, wavy lines as the True butterflies do, but skipping about with a sudden, jerking motion. Their flight is very short and almost always near the ground. Their prevailing color is dusky brown, with pale, whitish-yellow or transparent spots. The antennæ of the Skipper are hooked at the end, which is never the case with the True butterfly.

One of our largest and most beautiful Skippers is the



Eudamus Tityrus.

Eudamus Tityrus. It expands over two inches. The wings are dark, velvety brown. The fore pair are crossed by an

orange-colored band, which has a metallic lustre. Near the tip of the wings are a few spots of the same color. The hind wings are tailed, and on the under side are crossed by a silvery band. The antennæ are hooked, but have no knobs. The Tityrus Skipper appears about the first of July, and may be found until late in August, hovering over Clover and sweet-scented flowers. Its flight is very rapid, and although it flies very near the ground it is hard to capture. I have but one perfect pair in my collection. This one that Gilbert has brought in is very much broken and shows signs of having made a hard fight for its life. Eh, Gilbert?"

"Indeed, Sir," said Gilbert, "I thought the thing would struggle itself all to pieces before I could put it to sleep."

"The Skippers have a very strong hold on life," continued the teacher; "I have very often had a specimen ruined before I could quiet it. The *Hesperia Hobomok* is a very small variety of Skipper, expanding only a little



Hesperia Hobomok.

over one inch. It was named by Dr. Harris after a celebrated Indian chief. Its wings are dark brown, and on the centre of each wing is a large yellow spot covering almost all of the middle of the wing. The edges of the wings have delicate fringe, of a lighter shade of brown. The

under side of the fore wings is like the upper, only of a more delicate shade. The hind pair are brown underneath, and are marked with a yellow spot and a broad yellow band. The Hobomok Skipper is found almost all Summer, but it is never very common.

“Another Skipper, often found hovering over beds of sweet-scented field-flowers, is the *Hesperia Peckius*, commonly called Peck Skipper. It was named by Mr. Kirby in honor of Professor Peck. It expands only a little over one inch. Its wings are dark brown spotted with yellow, like the Hobomok Skipper, only instead of having one large yellow spot, the Peck Skipper has a row of small spots on its fore wing, and on the hind wing a row of short, unequal yellow lines. The under side is almost precisely like the Hobomok Skipper.

“I shall only describe one more to you,—the *Hesperia Leonardus*, or Leonard Skipper. This variety was also named by Dr. Harris. This pretty little fellow is of the same general color as the two last, but quite different in the marking. Across the fore wings is a yellow band, and on the front margin are two small yellow spots. The hind wings are also marked with a yellow band near the margin. The under side of the fore wings is of a more reddish brown than the upper, and the markings are of a paler yellow. Underneath the hind wings is a curved row of yellow dots. This little Skipper is commonly found in low lands.

"There are a great many more butterflies belonging to the Skipper family. One English naturalist describes as many as eighty. I have told you about those which are most common in our fields and meadows, and if you find any others you will always know them to be Skippers by the position of the wings when at rest.

"This is the last lecture we shall have on butterflies. I have not told you about half of the kinds which frequent our fields and woods, but I have endeavored to make you familiar with those varieties you are most likely to meet with on your walks to and from school. I hope that your interest in the study will increase so that by next year we may examine more carefully all the peculiarities of each insect, and extend our study from those insects common in our own locality to those of the whole world.

"Next week we shall meet on the shore of the pond for a lesson on Dragon-Flies."

CHAPTER XVII.

THE BOATING-PARTY. — DRAGON-FLIES.



ONE pleasant afternoon the boys all met in the grove on the shore of the pond. Frank, as usual, was skipping about, and had just tumbled and rolled over and over on the grass when Mr. Benedict came up the lane and joined the party.

"Take care, Frankie," said he; "if you stand on your little feet in that fashion we shall have to leave you at home."

"O, I'll do just what you tell me to," said Frank.

Just then a splendid green Dragon-Fly darted past them, and Frank with a great flourish threw his net. "Hurrah for the first specimen!" said he; but he looked suddenly very blank as the insect quietly soared off over his head.

"Why did n't you catch him, Frankie?" said Tom.

"You try, and then you will know without asking," replied Frank. "But only see how many Dragon-Flies there are off over those blue Pickerel-Weed blossoms in the water."

"What did you call those blue flowers, Frank?" asked Tom.

"Why, Pickerel-Weed; don't you know?"

"No, I never heard of any kind of Pickerel except fishes."

"Pickerel-Weed is only the common name for this blue flower," said Mr. Benedict; "but it is a very good one, for the Pickerel always love to hide away among its long roots. The proper name is Arrow-head. There is another kind of Arrow-head which bears a white blossom; you will often see it in damp ditches by the roadside. But come, boys! we must look for boats."

"I have engaged two large boats for us," said Gilbert, "and they are chained to the branches of that Willow."

The party walked over a bridge across a little rivulet which emptied into the pond and soon came to the Willow. It was a very large tree, growing out over the water so that its sweeping branches formed a snug boat-house.

"I will row one boat," said the teacher, "and Gilbert would better row the other, as he is the largest of you, and, if I am not mistaken, a good oarsman and swimmer."

"O, I can swim too!" said many voices at once.

"I am glad of that," said the teacher; "but I sincerely hope it will be an accomplishment not necessary to put in practice to-day. Still, it is a good plan to have one good swimmer in each boat, for boats can upset and boys can fall into the water."

Without further delay the boys ran to the boats and tumbled in over the sides.

"Lightly, lightly," said the teacher, as Tom jumped down from a branch of the Willow and made the boat rock from side to side. "Now, boys," he continued, "seat yourselves so as to balance the boat. Here, Frank, you must come in my boat, so that I can keep you still. Now one, two, three!"

And Mr. Benedict and Gilbert pushed away from the shore. The teacher had thought it best to take boats to hunt for Dragon-Flies, as the insects so often flit off over the water far out of reach of a person hunting on the bank. The party were going now to row round the pond until they were tired and then anchor among the weeds and Lily-pads near the bank, and try their luck with their nets.

It was a beautiful day for such an excursion. The sky was full of large rolling clouds, and there was no wind. The boys were all in fine spirits, and full of fun and play. Some leaned over the side of the boat holding their hand so that the sparkling water rippled through their fingers. Others commenced singing.

"We must give one song to the old flag, boys," said Mr. Benedict, as he pointed to the streamers with which each boat was dressed.

"We 'll rally round the flag, boys, we 'll rally once again," shouted Hal, and every boy joined in. Their young voices waked all the echoes of the lake, and the

very hills and woods rang back the "Battle-cry of Freedom."

World's End Pond was a beautiful spot. It was six miles round. The shore was rocky and the water washing against the ledges had hollowed out innumerable little caves into which the water swashed with a hollow, gurgling sound as the boats passed by. On the opposite side of the lake from where they started was what was called the inlet. A brook flowed into the pond here, and all around its mouth the shore was low and marshy. Here, the teacher said, was the best place to catch Dragon-Flies, as they delight to dart about among the long reeds and water-grasses. The two boats were pushed up among the broad Lily-pads, and anchored by means of large, flat stones attached to stout ropes, to keep them from drifting out into the middle of the pond on the current of the little brook.

"O, here they all are," said Ben Wait. "I hate the long-tailed things. I am going to trap all I can and drown them in the water."

He threw his net for a black and white insect whose lace wings were glistening on a reed near by.

"You won't throw that fellow into the water anyway," said Hal, as he watched the Dragon-Fly soar away over the pond.

"Now, boys," said Mr. Benedict, "we must be industrious,

for over the top of those hills I see a showery cloud rolling up, and I don't think a bath in the boat would be much pleasanter than one out of it."

The boys now became very quiet. Kneeling on the seats, with a skilful swing of their nets, they brought a large number of beautiful lace-wings into the boat. Dragon-Flies have a strong hold on life, and sometimes it took several doses of ether to quiet the fluttering of their wings. Joe Dane had a little brush attached to his ether bottle, and he was busily engaged in "feeding one," as he called it. "Look how he eats!" said he. The boys all looked with wonder at the large savage jaws which the insect was opening to suck the brush. Two or three mouthfuls were enough to stiffen his wings forever.

"Are there names for each kind of Dragon-Fly, as there are for butterflies, Mr. Benedict?" asked Joe.

"They have scientific names," replied the teacher, "but no common names except what our friend Frank calls them, Devil's Darning-needles. They belong to the division of Entomology called Neuroptera. When we reach the shore where you can all hear me, I will tell you about the way in which Dragon-Flies are classified. But, boys, that shower-cloud is increasing very rapidly. We have a good half hour's pull between us and the landing-place, and as you have already captured a large number of specimens I think we would better haul up our anchor and turn towards home. Frank, you little rascal, sit still."

Mr. Benedict's warning came too late. Frank made a bold spring for an insect that was flying far above his head, and, losing his balance, fell into the water. Instantly Hal was over the side of the boat and both disappeared beneath the surface. For a moment it seemed as if the whole boat-load would follow. Every boy sprang to his feet, and the boat rocked violently from side to side. It was all Mr. Benedict could do to control them. He knew that Hal was an expert swimmer, and felt that it was his duty to keep the boat from upsetting. It was only an instant, although to the boys who stood silent and watchful in the boat it seemed an hour before Hal appeared, grasping Frank in one hand. He had caught him just as he was going down.

"Back! back to the other end of the boat!" shouted the teacher to all the boys who tried to rush to the rescue; "balance her quick while I help them in!"

Hal had already supported himself by catching hold of a piece of board which lay among the reeds, and, pushing Frank towards Mr. Benedict, he said, "Look to Frank, I can take care of myself."

Soon as Frank was lifted into the boat he commenced making a vigorous use of his hands to clear the water from his face and eyes, while the eager, excited boys were using their handkerchiefs to dry his hair and wipe his clothes. The little fellow was not hurt, but somewhat

confused by his sudden bath. He rubbed his eyes and looked all round, then began to cry; but his crying soon changed to a laugh as he saw the boys trying so hard to rub the water from his clothes. Meanwhile Hal, with Mr. Benedict's help, had got into the boat again.

"O Hal, are you hurt?" said Frank, turning suddenly towards him.

"No, — yes, only a scratch, that is all. I suppose I got it going down among those bushes."

Hal's voice trembled with cold, and Mr. Benedict insisted upon wrapping his dry coat about him. Frank was already well provided for by the other boys. By this time the sun had disappeared, and dark, heavy clouds covered the whole sky.

"Now, Gilbert," said the teacher, "we must pull well or we shall all have a bath as well as Frank and Hal, before we reach the landing."

"I just felt a drop on my nose," said Ben Wait.

Soon the rain began to fall very fast. They were not half-way across the lake, and it was impossible to escape a wetting.

"We may as well take it easy, Gilbert," said Mr. Benedict as he laid down his oars and took breath. The boys all gave a loud laugh. They made a very funny picture, sitting in open boats in the middle of the pond, with the rain pouring in little cascades from their hat-brims.

"Now you are all as badly off as I am," said little Frank in an exultant tone.

The boys did not care for the rain. They had carefully covered up their specimens, and a wetting on a warm Summer day was only so much fun. They were all in the best of spirits when they reached the landing.

"I think, under the circumstances, we would better postpone our lecture on Neuroptera until we meet in the school-room," said Mr. Benedict as he gazed upon the dripping crowd.

"Let 's all escort Frank home," said Ben Wait.

Just as they were ready to start Frank ran and slipped his little plump hand into Hal's, and half whispered, "I was so silly to tumble into the water that I am half ashamed to thank you, Hal, for pulling me out."

"No thanks, Frankie," said Hal; "I only had a good ducking, which was very pleasant on such a hot day."

The following afternoon after school Mr. Benedict told the boys if they would remain a little longer he would tell them something about the Dragon-Flies. The next days were to be devoted to the school examinations, and after that there would be five weeks' vacation, so that this seemed to be the best time to complete what the rain had broken up the day before. All the boys were there. Frank was just as lively as ever, and Hal, although his arm was still somewhat lame from the bruise he had re-

ceived, was none the worse for his sudden bath. The boys were all glad to remain. Mr. Benedict had taken all the specimens home with him the day before, and had brought them to the school arranged in the proper order.

“Dragon-Flies belong to the division of Entomology called Neuroptera,” said he. “This division includes all insects having four lace wings, prominent jaws, and no sting. The subdivision to which Dragon-Flies belong is called Libellulina. The Dragon-Fly’s head is always large and his mouth is very ample. His eyes are prominent and project on each side of his head. His legs are short and his abdomen very long. He is a very voracious fellow, and devours mosquitoes and other small water-insects with great eagerness. His life is spent darting over the water and marshy places. He flies very rapidly and with great strength, and on this account is often seen far from any damp place. I have even caught them flying about my house in the city, but their home is always by the water-side. The worm and pupa of the Dragon-Fly live in the water, and are nourished by minute aquatic insects. They resemble the perfect insect, except they are wingless. Dragon-Flies, or Libellulinæ, are divided into two families, Agrionidæ and Libellulidæ. The Agrionidæ have a head much larger than the rest of the body, their eyes are far apart, and the wings are generally narrow and very gauzy, and are slightly elevated when the insect is at rest. Agrioni-

dæ are divided into three subdivisions, the distinguishing points of which I shall not describe to you, as the difference is so slight you would not be able to understand it. There are a great many varieties. The most common kind is the Common Agrion. Here is a very fine specimen. You see it has a large head. Its body and tail are black, striped with bright green. The wings expand nearly four inches. They look like delicate lace, but do not break easily. Each wing is marked with three brown or black blotches on the front edge. There is another kind called Gigantic Agrion. Its head is large and its eyes immense. It has a yellow face and huge hairy jaws which open and shut upon its prey with great rapidity. Its body is generally black, and sometimes marked with yellow spots. The wings are like those of the Common Agrion. The Beautiful Agrion is smaller. It has an azure-blue body marked with black, and the markings on the wings are delicate blue. This is one of the prettiest Dragon-Flies we have. Others belonging to this family are red with pale-yellow wings, or black striped with blue or yellow. The variations of color are almost infinite. Some males are armed with curved forceps, which look very savage, but are harmless.

“The Libellulidæ have broader wings than the Agrionidæ, and during repose they are placed horizontally. The males of this family are all armed with forceps. The

Libellulidæ are arranged by some scientific men in six groups, but only two groups are generally recognized, and it would be almost impossible for any one but a naturalist to distinguish the differences even between these. It is unnecessary for such young students as you are to trouble yourselves at present about these delicate distinctions.

“Some insects belonging to the Libellulidæ are very beautiful. Here is one with a blue head and large green eyes, and wings thin as a cobweb. Here is another which is called the Fairy Libellula. Its head is green with blue eyes. There is a brown spot on its forehead, and the body is of the same color and very slender. The wings expand about three inches. They are exquisitely delicate, appearing like the finest lace-work and of a light ashy color, which next the body fades into white.

“There are many other kinds which I might describe to you, my young friends, but you will scarcely remember what I have already told you.”

The boys had remained perfectly still while the teacher was talking, and had listened with great attention. Now that he had finished they all came round his table to examine the specimens a few moments before separating to go home.

CHAPTER XVIII.

THE MOUNTAIN TRAMP.



WHEN the school closed Mr. Benedict told the boys that if they would like to form a party to take a pedestrian tour through the mountains, he would go with them.

He thought they might be away from home a week, and after that he would have a little time to himself before the commencement of the Autumn school term. A large number of boys were eager to go.

"O Mr. Benedict! take me with you!" said little Frank.

The teacher said he did n't think Frank's mother would let him go. It would be too hard for him to walk so far.

"Are you going to walk all the way,—walk a whole week?" asked Frank.

"Yes, my little friend; and you are such a Skipper, you would go twice as far as the rest of us."

"We do not want anybody to take care of," said Ben Wait. "You ought not to think of going, Frank."

"For shame, Ben!" said Joe Dane. "Frank shall go if he wants to. If he gets tired, I 'll come home with him in the cars."

The morning they were to start, about a dozen boys came to Mr. Benedict's room. Each boy had a small leather wallet slung on one side to hold his luncheon, and in addition they all carried their butterfly-nets, for they depended upon enriching their collection while they were away, if not with new varieties still with more perfect specimens of what they already had. Frank was going too. He was very sure he could walk as far as any of them.

It was a very fair morning for such a start. To save time they took the cars for the first twenty miles, and then, leaving the towns and villages behind them, they entered the mountains. They were all in fine spirits, and walked with a very quick step.

"I say, boys," said Mr. Benedict at length, "we must walk slower. You start as though you were only going to the class-room. At this rate we shall all give out before noon, and you know we are starting for a whole day's tramp."

Frank was more excited than any of the others. He talked all the time, and asked questions about everything they saw along the road.

"Frank seems to think every new place is full of new things," said Ben, who was still a little out of humor that so small a boy should be one of the party.

"Well, I think you are always cross, Ben," said Frank, "and I don't think that is anything new."

"I won't be cross any more, Frankie," said Ben, who by this time felt somewhat ashamed of himself. "I did n't want you to come, because I was afraid you would get tired."

"We 'll see who will get tired," said Frank, laughing. The sharp little fellow knew that Ben was the laziest boy in the party, and he felt pretty sure of a chance to pay him back.

By noon they had gone quite far up into the mountains, and Mr. Benedict ordered them to "halt" for luncheon by the side of a beautiful waterfall. This waterfall was in a shady, rocky glen between the mountain peaks. It was quite high, and as the place where the water made its leap was almost concealed by the branches of the tall trees which grew round the foot of the Fall, the shower of glittering diamonds seemed to come down from the sky. The water gathered itself together again in a rocky basin, the sides of which were covered with delicate ferns, and then plunging and leaping merrily over rocks and moss-covered logs, it bubbled onward to the valley far below. The boys seated themselves on the rocks near the foot of the Fall, and ate their luncheon with good appetites. They would have been glad to stay in the glen all the rest of the day, but Mr. Benedict said they must reach the top of the mountain before night. There they would find some barn in which they could sleep. Before leaving

home they had supplied their wallets with two days' provisions.

"Perhaps we shall find the hermit of the Deserted Village," said Mr. Benedict.

"Why, teacher, what 's that?" asked little Frank.

"It is an old man who lives alone with his dog on the top of the mountain," replied the teacher. "Long ago there were some mills for washing and melting iron ore up there, and around them a collection of huts. Mill and hut are deserted now, and this old man lives there alone. I visited him last Summer, and if he survived the cold of the past Winter we shall find him there still."

The boys travelled on all the afternoon. Now and then they were drawn aside from the path in pursuit of some butterfly, and Hal was so fortunate as to secure a very fine specimen of the *Hipparchia Semidia*, or Mountain butterfly described in Chapter Fifteenth. He saw a pair of the fairy-like creatures hovering over a bush in the shade of a tall tree, and succeeded in capturing one of them. The other floated away out of his reach.

The sun had set, its parting rays bathing the plain below and the sky above in a splendor of gold and purple, and twilight was changing into moonlight, when our party passed out of the woods and stopped on the shore of quite a large pond. Near by they could see the outline of about twenty huts, and in the window of one of them a faint light was twinkling.

"The old man is at home," said Mr. Benedict.

Just then a large dog came bounding towards the boys, barking and showing his teeth. "Hallo, Touzer. Good fellow!" said Mr. Benedict, advancing to meet him. On hearing his name, the dog stopped and gave one sniff at Mr. Benedict's hand which was extended towards him, then bounded upon him and thrust his rough tongue against his cheek, uttering all the while little short, quick barks of joy. By this time the hermit himself had come out to meet the party. He recognized the teacher at once, and heartily welcomed him and all his young companions to the shelter of his hut.

"When I heard Touzer's little short *wuff, wuff*, I know'd 't was a friend a comin'. He knows who 's who, Touzer does. You ought to see that dog when he thinks there 's mischief brewin'," said the old man.

"Do you ever have any troublesome visitors in this quiet place?" asked the teacher.

"Well, no, not exactly; only 'tain't so far from the village but what the boys, they stray up here now and then, when they 're gunnin' and the like, and they try to torment 'an old chap like me. The young 'uns don't mean no harm, only mischief; but Touzer, he don't understand it, and the way he sets their heels a flyin' down that steep path is a good 'un."

All the while he was talking the old man bustled round

his hut. He livened up his fire and soon produced a string of fine Pickerel he had caught that afternoon in the pond.

"My good friend," said Mr. Benedict, "we did not come to ask your hospitality to such an extent. My boys are all provided with supper and breakfast, and would be very glad to have you share it with them."

But the old man still kept on preparing his Pickerel for the fire. "If your young gentlemen will eat up the critters, it 'll save my trampin' to the village with 'em in the mornin'," said he.

Meanwhile the boys were all resting after the long walk. Some were sitting round the door of the hut, enjoying the bright moonlight, others had gone to bathe their tired feet in the cool water of the pond. While little Frank, who did not seem at all weary, was becoming very friendly with Touzer, rolling over and over with him on the floor, and hiding his curly head in the dog's long fur. The old man watched the playfellows with great delight. "Touzer never 'll forget you, little fellow, see if he does." And the hermit worked away at his fish, boasting all the while about the exceeding wit and wisdom of Touzer. At last all was ready, and never did morsel taste so sweet as did the Pickerel to the hungry boys. They all fell to, and "did very well without fork or knife."

After their repast they chose their sleeping-places. Some went to one of the other huts near by, which, although

the doors and windows were gone, still afforded very good shelter on a warm Summer night. Little Frank declared his decision to "stay with Touzer," and curling down beside the dog was soon sound asleep.

The boys all waked very early the next morning and sprang up to enjoy the beautiful panorama spread out before their eyes. Along the horizon stretched a blue range of mountains, whose peaks were partially concealed by the white morning mist; in the middle distance broad fields and hills were interspersed in beautiful variety, and here and there a dot or a line of mist indicated the location of a pond or the course of some winding river. The boys performed their toilet on the shore of the pond, and then proceeded to look about the Deserted Village. The huts were scattered about over an open space of ground on the summit of the mountain. The view on one hand was shut off by the tall forest trees, but on the side towards the pond the land was all open and very rocky. Very beautiful pictures the inhabitants of the Village must have had spread out before them as the changing seasons produced ever new tints and variations of light and shade on the glorious panorama at their feet.

Our party found little to interest them about the huts. They were mere empty sheds without windows and doors, and many of them were roofless. But the old mills were matters of great interest. They were very picturesque, the

boarding of the sides having nearly all fallen off, leaving a mere skeleton of beams, inside of which were many remains of the works, old shafts, pieces of broken wheels, and other things, all fallen together and overgrown with moss. The mills were built over the brook which flowed from the pond, and the water gushed through the old buildings, foaming and sparkling over the broken and silent water-wheel, which lay motionless, its iron shaft rusted fast. The boys thought they never had seen such a place to play in before, and even Gilbert forgot his assumed dignity as the oldest of the boys, and was down on his knees digging out an old wheel, when Mr. Benedict came in search of his young companions. He said if they wanted to reach the Falls House that day they must be off. None of the boys were ready to leave the Deserted Village, and little Frank could hardly help crying when Touzer put his big nose close to his face and barked an affectionate good-by. Mr. Benedict, however, thought it unwise to remain any longer; so, after thanking their kind host for his attention, the boys set out for another day's walk. It did not come quite so easy as when they first started, and they walked with a much slower step. Still, not one was willing to be the first to say he was tired.

Their road wound along on the top of the mountain range, and the morning air was fresh and cool. It was:

nearly noon when Ben Wait finally said: "Teacher, is n't it almost luncheon time?"

Mr. Benedict said soon as they came to a pleasant place where there was a spring of water they would stop. It was not long before such a place was found. The boys were all glad to lie down on the soft, green turf, and for once little Frank sat still while he ate his sandwiches and cake. As soon as they were eaten, however, he was up and dancing round again. He had taken his net and made several fruitless attempts to capture some little butterfly flitting past, and finally threw it down impatiently over a bush, when something fluttered heavily into it.

"O teacher! O Hal! come here, quick!" screamed little Frank, while he tried with his own little hands to secure the large green insect fluttering in his net. Mr. Benedict was there in a moment.

"Let me manage him, Frank," said he. After a dose of ether the large, beautiful creature lay quiet in the net, and Mr. Benedict's ready fingers soon transferred him to the cork. His delicate wings were spread out and fastened in place with pins, and he was carefully placed in the large box where they carried their specimens.

"That is a Luna moth, my boy," said Mr. Benedict, in reply to Frank's eager inquiry. "He must have been hiding through the day among the leaves of that shrub, and your net falling over it disturbed him."

It was now time to go on, and the boys were quite ready.

"Why, where is Ben?" said the teacher, as he looked round on his little band.

"Here are his boots down behind this rock," said Hal; "he can't have gone very far barefoot."

"No, indeed," said Joe Dane; "he is too tender of his feet for that."

"Here he is, and fast asleep too!" shouted little Frank, who was skipping about among the bushes. "Come, Ben, poor Ben, wake up," and Frank seized the sleepy boy's hand and tugged at it with all his little strength.

"Let me alone," grunted Ben. But the loud laugh of all the boys soon roused him from his slumbers. He sat up and tried to rub open his sleepy eyes.

"We are all waiting for you, Ben," said the teacher in a pleasant voice; "rouse up and put on your boots."

"I can't put 'em on," whimpered Ben; "my feet are all covered with blisters now."

"Such a little fellow as you are, Ben, ought to have stayed at home," said Joe Dane, in a hectoring tone.

Frank began to feel sorry, and, creeping up to the lazy boy's side, he said: "I'm sorry, Ben, you are so tired, but I don't believe the boot will hurt you much. I'll carry your bag and net if you will let me."

By this time Ben was fully awake, and with Mr. Bene-

dict's help got his boots on and started off with the rest, although he made a great show of limping and was pretty silent all the rest of the day. Some time before sunset the party reached the Falls House, which was a small country hotel. It stood in a beautiful spot, at the foot of a deep, rocky gorge, and from its windows could be seen the waterfall which gave the name to the house. All around rose the grand old rocky forms of mountains, some covered with heavy forests, others with sides of bare precipitous rock, supporting nothing save a few creeping brambles. The boys were all very glad to eat a hot supper and go to bed. Hal and Johnny Webb stayed up longer than the rest and went out on to a rustic bridge near by to see the Falls by moonlight. It was very still; not a sound could be heard except the splash of the water as it leaped over the rocks. The boys sat a long time without speaking. Johnny was thinking of his sister Annie at home, and wondering if next Summer she would be strong enough to visit this beautiful place with him. At last Mr. Benedict came out to bring them in, for in the morning they were going through the gorge, and some rest was necessary to prepare them for it. There were quite a number of ladies and gentlemen at the hotel, who were going through the gorge at the same time, and they were glad to have our merry young folks join the party.

The next morning the boys were all rested, and even

Ben was bright and good-natured. The walk over the mountain to the other end of the gorge was rather hard climbing, and several of the ladies grew discouraged and preferred remaining on the top of the cliff to going on any farther. It was a dizzy place, for on one side the precipice was many hundred feet high, and so perpendicular that a plumb-line might swing clear almost to the bottom. Some of the more daring ones crept to the edge and looked over at the torrent rushing at the bottom of the gorge far below. The boys all had their nets, but used them to little purpose, as here among the rocks and briers there was no opportunity to give chase to the shy insects.

"There," said Frank, to a gentleman who had taken a great fancy to him, and talked with him all the way over the mountain, — "there, I lost that fellow!"

"What do you want it for, my boy?" asked the gentleman.

"O, we boys are studying *Lepidoptera*," said Frank, twisting his little tongue slowly and with great effort round the big word, "and we came on this pedestrian tour (Frank was bound to do credit to his teaching) on purpose to get new specimens."

He then told all about their collection, and promised to show it to the gentleman when they returned to the hotel. Just then another butterfly darted past them, for which Frank threw his net but missed again.

"I don't care about that one. It was a Hunter's Butterfly, and I have some like it at home," said he.

"You know the names much better than I do, my little man," replied the gentleman.

The whole party were now at the head of the gorge. Some of the ladies looked fearfully at the slippery logs and rocks over which they must walk, and decided to go back the way they came. The teacher suggested that Frank would better go back over the mountain too, for the stream was much swollen with late rains, and he was afraid he could not safely take the little fellow through the gorge; but Frank pleaded so hard that Mr. Benedict finally consented, after a promise from him that he would keep hold of his hand all the way and not skip about as was his wont. And, indeed, there was little chance to skip about here. Their way led over logs so slippery that every step must be made with care, or a plunge in the water would surely follow. To be sure, the water was not deep, but our travellers did not care to get a wetting just then. After they had passed the logs they came to the rocks, which were still worse, as the moss on them was so soft that it was almost impossible to get a foothold. The boys enjoyed it immensely. It was excellent fun climbing where every step was dangerous. When they were tired they sat down to enjoy the grandeur and beauty of the scene. The cliffs covered with richest ferns

and mosses, rose many hundred feet on each side, and at the bottom of the gorge, not far below, the stream rushed rapidly between its rocky banks.

One of the gentlemen who had gone in advance of the others shouted back that the root ladder was covered with water, and that a new path would have to be made. Make a new path, indeed, when there was nothing but bare precipice to work with! The ladies who had been courageous enough to attempt the passage of the gorge sat down and waited while the gentlemen hunted for a path. They finally gave it up, but said there was a long tree-stump leaning against the rock, which possibly they might all slide down on. Anyway it was thought best to try it, and amidst a great deal of merriment the passage was actually accomplished. The poor old tree-stump which, previous to the slide bore a luxuriant coating of rich green moss, was stripped bare, and the clothes of all the party bore open testimony of the manner in which they had embraced the stump in their passage. Frank was so covered that Joe Dane said he could think of nothing in the world but a green turtle every time he looked at him. The party passed through the remainder of the gorge and reached the hotel without any further adventures.

After supper that night Mr. Benedict proposed to the boys that, as the scenery was so beautiful here, they should remain at the Falls House during the rest of their week,

making excursions round on the mountains whenever they felt inclined. When their week was up they could go directly home in the steam-cars. The boys all agreed heartily to this plan, for they had not seen half enough of the gorge nor of the mountains around it.

"I think I should like to pedestrian a little longer," said Frank, with a comical smile; "but I 'm willing to stay here, as Ben is so tired."

They all laughed at Frank's ready jokes, and Ben joined with them.

"I shall always after this vote for Frank," said he, "for you can neither drown him nor get him tired. I dare say his feet have not a single blister on them."

After a few more days of delightful scrambling over the rocks, Mr. Benedict and his young pupils bid good by to the mountains and reached home in safety. Then came four long weeks of vacation. The teacher was away, and many of the boys had gone off in various directions. Tom and Hal were too much interested in Annie to care to leave her again. Of course Johnny stayed at home, and the three boys, together with Rose, spent many long quiet hours in Annie's room. They brought all their butterflies here and arranged them neatly in the cases they had made for their collection. These cases were large, deep frames, with corks firmly glued on to the back at suitable intervals for the different sized butterflies. They placed

the largest butterflies in the centre and the smaller ones all round, leaving spaces here and there for large moths they hoped to capture. Some of Annie's chrysalids had opened, affording very perfect specimens to add to the boys' collections.

As to Annie herself, she was rapidly improving and was now well enough to sit up in her chair, but the Doctor had not yet allowed her to stand on her foot; she must have patience a few weeks more, he said, and then —

Meanwhile in quiet pleasure and anticipation the long Summer days of vacation wore away.

CHAPTER XIX.

ABOUT MOTHS.



AFTER the long vacation it was pleasant for the boys to meet once more in the old class-room. They were rested and refreshed in body and mind, and full of eagerness to hear what Mr. Benedict had to tell them about the moths. During the long tramp over the mountains they had added many rare and beautiful specimens to their butterfly collection, and succeeded in procuring many perfect pairs of varieties they had previously found at home.

They were already in their seats when Mr. Benedict came in. He did not commence at once to tell them about the moths, but spent a half-hour in reviewing the general facts relating to butterflies, which they had learned during the Spring and Summer.

"I think I have described to you the difference," said he, at length, "between the moth and butterfly when at rest. The True butterfly holds both pairs of wings upright, the Skipper elevates the fore pair only, and the moth holds both pair horizontally, folding the fore wings backward so as to nearly or quite conceal the hind pair.

I do not think you will feel as much interest just now in this division of Lepidoptera as you did in the butterflies, or Papiliones. The moths are very beautiful, but it is not so easy for such boys as you are to capture them, as they do not fly in the warm sunshine, but creep out after nightfall. You will now and then find one nestled in a dark corner under some leaf or behind the window shutters, and in going about among bushes I have often disturbed some old fellow who had settled down cosily to sleep away the day, and sent him flying out into the sunlight. In cases like this they are easily caught, for they cannot see well in the daytime, and fly blindly this way and that. Moths are divided into two great classes,—Hawk-moths, or Sphinxes, and Moths, or Phalænæ. These two classes are subdivided into many smaller classes, in regard to which nearly all naturalists differ in opinion. It is unnecessary for you to learn all these sub-divisions at present. I shall only tell you the names and, as far as I can, the habits of a few of the more common kinds and of some of the largest and most beautiful varieties.

“No doubt you have all heard about the troublesome little moths that destroy our fur caps and cloth coats, but perhaps you do not know that the moth which lives upon woollen cloth is a different variety from that which eats the furs. They all belong to the genus *Tinea*. These little creatures are very small, and there is nothing es-

pecially interesting in their habits, so we will pass them by and learn something about the Spinners, or Bombyces. The silkworms belong to this class. The moth of the variety cultivated in the United States is very insignificant, but the moth of the Japanese silkworm is large and very beautiful. The moth you caught among those bushes, Frank, was a Spinner."

"Can that fellow make silk, teacher?" asked Frank. "If he can, I want to know all about it, only please don't call him a worm, as you did the silkworms."

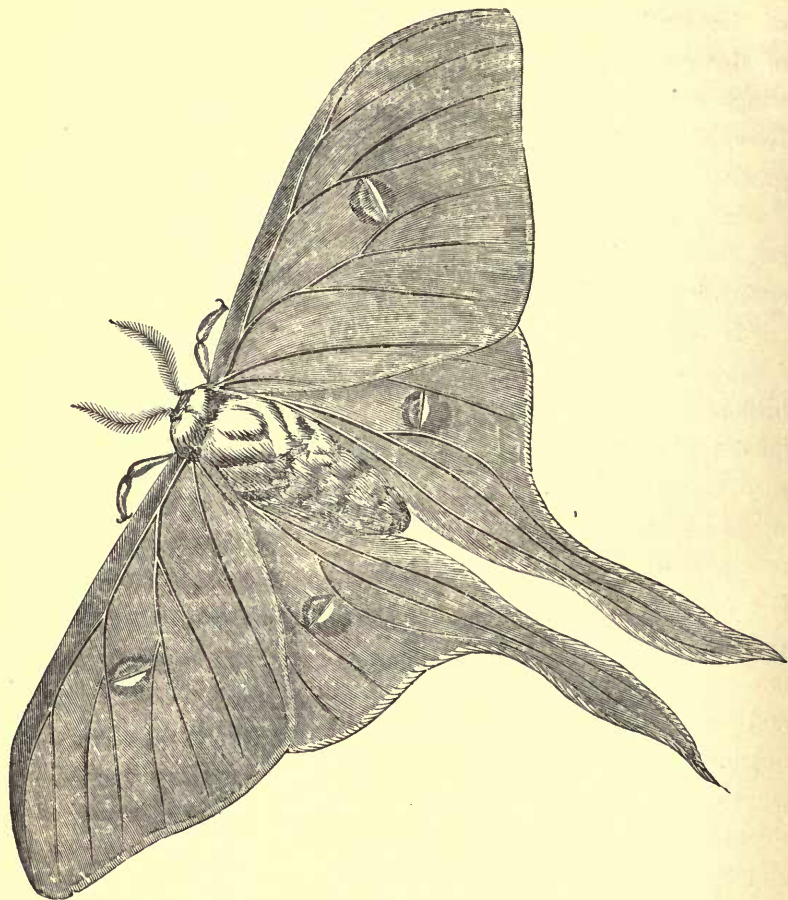
Little Frank never lost sight of the fact that he was the sworn enemy of worms and caterpillars.

"That moth, Frank, does not spin silk that is made use of like the silkworm. It is possible that the silk is strong, but the caterpillars of our common moths do not bear confinement under any system of treatment and feeding already tested, and on this account the silk has never received a fair trial. It is produced in such small quantities by the caterpillars of most moths, that it does not seem worth while to take much trouble to make the trial. And you know, Frank, that the moth in the winged state does not spin. It is the worm or caterpillar that makes the cocoon. All moths do not form cocoons. Some of them go into the ground and form themselves into large, shiny brown chrysalids, from which, at the proper season, the moth comes forth, and makes its way to the surface

of the earth. These moths which come, as it were, out of the ground are not often brilliant in color, but their wings are a beautiful mixture of black, gray, and white. Now, Frank, we will see what we can learn about your green moth."

Mr. Benedict had arranged it very handsomely in a box, and he now held it so that all the boys could examine it.

"It is called the *Attacus Luna*," he continued, "and is, I think, the most beautiful of all our moths. It is not as brilliant, nor quite so large as some others, but the exquisite delicacy of its wings both in texture and tint surpasses that of any other variety that flies here. The wings expand about five inches. They are of a pale, delicate green color. Along the front edge of the fore wings is a broad border of purple, and the hind wings are tipped with the same color all round. In the centre of each wing is a transparent eye-like spot, encircled by a ring of black and yellow on the upper side of the wing, and white beneath. Each hind wing has a tail almost two inches in length. The body of the *Luna* moth is very large and thickly covered with white down. The antennæ are yellow and beautifully feathered, and the legs are purple like the border. The worm of this moth lives on Walnut-trees. It is a large, ugly-looking fellow, with a very thick body several inches long. It forms its cocoon by tying several



Attacus Luna.

leaves together and creeping into the little cell inside them, where it spins its shroud. If you hunt carefully when you

are out nutting in the Autumn, you will find the cocoons fallen among the dead leaves. They are of the same dull brown color as the leaves, and are not very easy to distinguish from them. I found one of these cocoons once in the early Spring, when the snow had just left the ground. It was about the first of April. I carried it home and placed it under a glass on the top of my secretary. Here it remained until the last of May, and I had forgotten all about it, when one day as I was sitting at my desk writing I was startled by a loud crackling sound. It was several minutes before I perceived that it came from my cocoon. I at last saw that the cocoon was moving slightly. As I watched it the motion gradually increased, and in about half an hour the cocoon burst, and an unsightly thing crawled forth. It appeared like a large white worm with two flippers, I might call them, in the place where the wings were to be. These flippers were not much larger than the antennæ which, at the very first, were broad and feathered. The creature moved vigorously about and tried to attach itself to the top of the glass, but the smooth surface afforded nothing to which its feet could cling, so I removed the glass and put in its place a small osier basket of openwork. Very soon the insect suspended itself to the top of the basket, and its wings commenced to expand. As they opened, the delicate green color, of which there was no appearance at first,

began to show itself. The moth clung to the top of the basket, opening its wings broader and broader, until it seemed a marvel that so much could have been contained in the small, colorless bunches which were all that indicated the wings at the time of its birth. At first the wings were crumpled like the leaves of a Poppy when it first drops its calyx and opens to the warm rays of the sun, but as the air gradually dried them they smoothed themselves out, and at last the perfect moth stood before me. Poor fellow; his was a short life. Fearful that in fluttering to escape he might injure his delicate wings, I gave him his first and last food, a drop of ether, and consigned him to a prominent place in my collection."

The boys had listened very eagerly to this description. Soon as Mr. Benedict stopped talking little Frank burst out with a question, which set the whole school into a roar of laughter.

"O teacher!" said he, "do you really suppose my moth was born that way?"

"Yes, Frank, of course he was, only instead of a basket he probably had a cosey green arbor among the leaves of some bush in which to expand and dry his wings."

The teacher then told the boys that he should wait until the next meeting before telling them about the other moths belonging to the genus *Attacus*. When they met next time he thought he could finish all he intended to

say about the moths, and after that they might plan for their Festival.

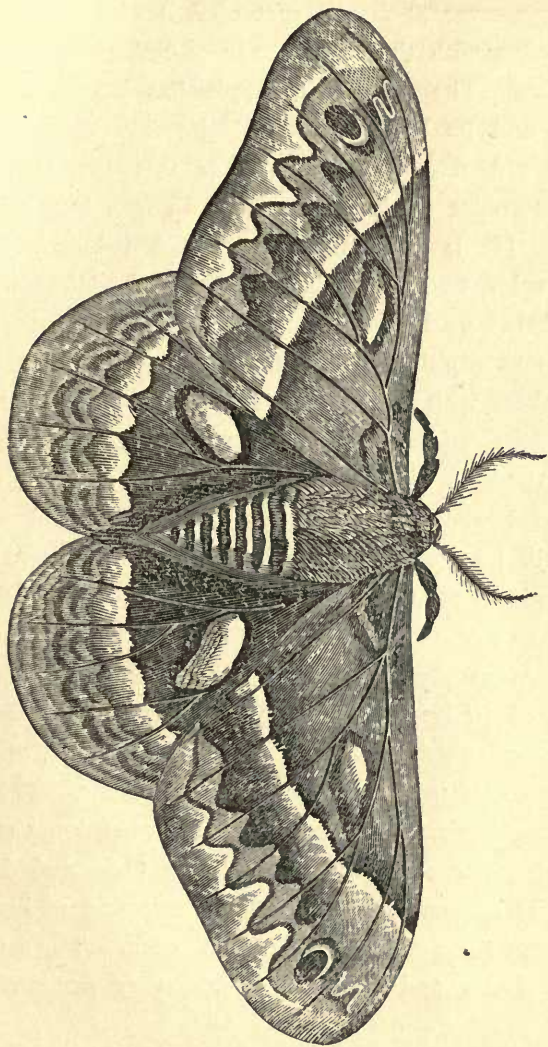
“And after that,” said Tom, with a long sigh, “I am going home.”

CHAPTER XX.

ABOUT MOTHS — *Continued.*

THE class were not able to bring any specimens of moths to the next meeting. Mr. Benedict had foreseen this difficulty and had provided himself with specimens from his own collection.

"I have already described the *Attacus Luna*," said he, "and to-day I purpose telling you about the others of that genus. They all belong to the grand family of Spinners, or Bombyces. There are four large and magnificent insects belonging to the genus *Attacus*, all of which I have captured myself in this locality. The *Luna*, *Cecropia*, *Promethia*, and *Polyphemus*. The *Attacus Cecropia* is quite as large as the *Luna*. Its wings often expand over six inches. Their color is reddish brown with a drab margin, through which runs a black line. The hind wings are rounded, and this line follows the outline of the edge, but on the fore wings it is deeply waved. Across the middle of the fore wings is a wavy white stripe shaded with brick red on the outer edge. The same stripe crosses the hind wing nearer the margin. The fore wings near the shoulder are dull red, and on their tips is a black spot with a bluish crescent. Near the centre of each wing



Attacus Cecropia.

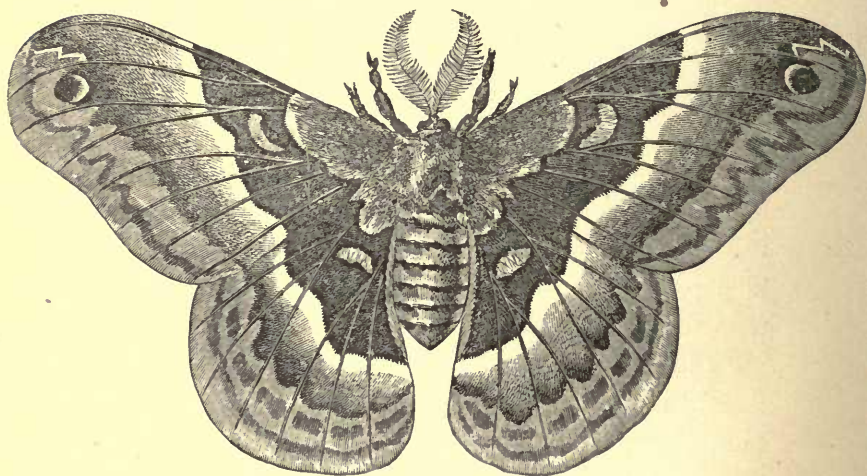
is a long, crescent-shaped spot of dull white shaded on the lower edge with the same shade of red as appears on the shoulders. The *Attacus Cecropia* has large feathered antennæ, and its body is very thick and clumsy : its back is dull red, and underneath it is mixed red and white. The caterpillar of the *Cecropia* moth is a huge, disgusting fellow. He is more than three inches long, of a clear green color, and covered with red and yellow warts and black bristles. It lives on various kinds of fruit trees. I have often captured specimens of this caterpillar and supplied them with the proper leaves for food, in the hope of seeing the process of transformation to the cocoon ; but this caterpillar, like others of the genus *Attacus*, does not like confinement, and my specimens have always died. You will have no difficulty in finding the cocoons. They are firmly attached to the side of twigs, and the best way to preserve them is to cut the twig and allow the cocoon to remain as placed by the worm. Sometimes the cocoon is twisted off by the wind and falls among the dry leaves. The insect remains in the chrysalis all Winter, and breaks forth from its prison cell some time in June.

“The *Attacus Polyphemus* is also a very large moth. In the caterpillar state it lives on the Oak and Elm, and forms its cocoon with an outward covering of leaves very much the same way as the *Luna* moth. The caterpillars of the *Luna* and *Polyphemus* are very similar, but the

moths are entirely different. The hind wings of the Polyphemus are round, without the slightest indication of the long tail of the Luna. The color of the wings is dull yellow, slightly clouded with black. Near the margin of the fore wings is a gray band, and at the shoulder are two short red and white lines. Just within the edge of the hind wings is a dark gray band with an outer edge of reddish white. On the centre of each wing is a transparent spot, crossed by a fine line, and encircled by rings of yellow and black. The whole is surrounded by a large blue spot shaded into black. On the fore pair of wings this spot is much smaller and less prominent than on the hind pair. The wings of the Attacus Polyphemus expand from five to six inches.

“The Attacus Promethia is much smaller than the other three. It rarely expands over three and a half inches. Its caterpillar lives on Sassafras and Wild Cherry trees, and the silk with which it attaches its cocoon to the twigs is so strong that the rudest winds and storms of Winter have no power to disturb the case of dried leaves within which the cocoon rests securely. When the fresh June foliage is in its prime the moth breaks forth. The color of the Promethia moth differs according to the sex. The male is dark bluish brown, and the female a light reddish tint. Across the middle of the wings, in both, runs a whitish line, shaded toward the margin into a wide, clay-colored

border through which runs a wavy line of red. Along the edge of the hind wing are six oblong spots. Near the tip of each fore wing is a round black spot within a bluish white line. At the centre of each wing on the female there is an oblong reddish-white spot surrounded by a line



Attacus Promethia.

of black. These same spots may be seen very faintly on the under side of the male, but never on the upper side.

“The *Arctia Acrea*, or Beach moth, is a small but very pretty variety, now becoming quite common in our inland towns. Its home is on the great salt marshes, but it is supposed that the chrysalids have been brought inland with loads of salt hay, and in this way it is fast becoming

at home in a new atmosphere. The caterpillar of the Beach moth belongs to the bear family, so called because the caterpillars belonging to it are covered with hairs, *Arctia*, the name of the genus, being from the Greek word for bear. The female of the Beach moth is very beautiful. The wings, which expand about two inches and a half, appear like white velvet marked with fine black spots. The male of this moth is not quite so deli-

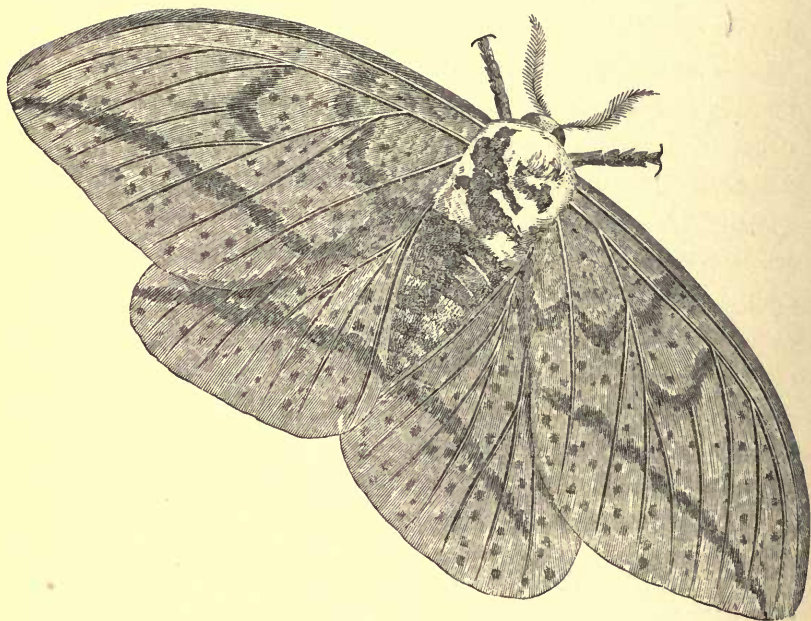


Arctia Acraea.

cate as the female and is a little smaller. Its fore pair of wings are white marked with black, the same as those of the female, but the hind pair are reddish yellow, also marked with black. The body of the moth is the same in both male and female. The head is white and velvety, and the body is reddish yellow, with a line of black spots on the back.

“Another very beautiful moth is the *Dryocampa Imperialis*. I have a pair of these which at different times were hatched from chrysalids in my possession, and I have brought them here to show you. Unfortunately, I was not present when either of these insects came forth. I found them fully open and ready for flight. The caterpillar of this moth goes into the ground to form its chrys-

alis, and the pupa remains there all Winter. In June the chrysalis works its way to the surface of the earth, and projects the end through which the moth is about to burst forth. You will often find the chrysalids while digging

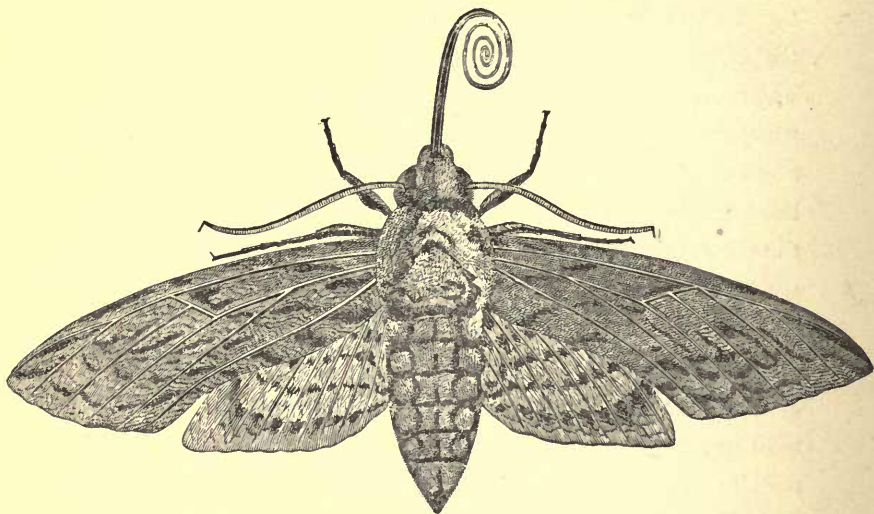


Dryocampa Imperialis.

your garden in the Spring, and although the removal from the ground before the proper time often tends to kill what life there may be in the inside, still very frequently this is not the case. I have often been successful in feeding

the worms in a box of earth, and in that way allowing the chrysalis to come out of the ground at its own time. You will find the worms of the *Imperialis* moth on Button-wood-trees. These worms are several inches long and of a greenish color, with a red tint along the back. The head and legs are pale orange. If you catch them about the first of September, which is near the time they are ready to go into the ground, they will take kindly to your box of earth, and your experiment will probably be successful. The moth of the *Dryocampa Imperialis* expands about five inches. It is of a delicate yellow color, sprinkled with purple dots. Across each wing is a wavy band of purple. The body is the same color as the wings, yellow dotted with purple.

"I have told you that this section of *Lepidoptera* is divided into two grand classes,—Moths and Hawk-moths. I have described to you some of the largest of the Moths, and will now tell you about a few belonging to the other division. The Hawk-moths are almost all of them large and clumsy, but for all that they are frequently called Humming-bird moths, from the loud humming sound they make in flying, and because they hover over flowers in the same manner as humming-birds, while taking their food. These moths generally appear at twilight, before it has grown very dark. The caterpillars of the Hawk-moths crawl into the ground for transformation, and the pupa remains there through the Winter.



Sphinx Quinquemaculatus.

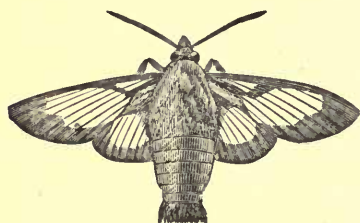
“One of the largest of these moths is the *Sphinx Quinquemaculatus*, or Five-spotted Sphinx. It is named from the five round orange spots on each side of the body. You are probably all familiar with the large green potato worm, as it is called. This is the worm of the Five-spotted Sphinx. It lives among the potato vines all Summer, and about the last of August crawls into the ground, where it remains until Spring. The Five-spotted Sphinx is a coarse-looking creature. Its wings are a dull mixture of black and gray. They expand a little over five inches. The tube through which this moth draws its food is very

curious. I remember watching them, when I was quite young, playing about in the early evening over the Honey-suckle in front of my father's house. The long tongue which they thrust down into the deep cups of the flowers excited my wonder so much that I determined to catch one and examine it. After working with my cap for some time I succeeded in capturing a fine specimen. After securing him under a glass he appeared to have no tongue at all. Supposing I had caught the wrong one, I let him go and trapped another, with, however, the same result. I was sure that this fellow had a tongue, for I had seen him use it. My first thought was that it was broken off, and I looked for it in my cap. Finally I discovered it carefully coiled up and quite concealed by the two feelers at each side of the head. After killing the insect I unrolled the tongue. It was full five inches long.

"There is another very common kind of Sphinx or Hawk-moth which lives on Elm-trees. Its wings expand about four inches, and are of a very delicate ashen gray marked with white. Its name is *Ceratomia Quadricornis*, but I propose that we call it the Elm moth, for I don't believe that one of you will ever remember the other name. Sometimes these Elm moths are so numerous as to do great mischief to those noble trees. The wings of all these Hawk-moths are quite peculiar in shape. The fore pair are very long and narrow, suited for a strong

and rapid flight. The hind pair are very much shorter and also quite narrow.

"The clear-winged Sphinxes, belonging to the genus *Sesia*, are very pretty. They do not seem like moths.



Clear-winged Sphinx.

Instead of moving about heavily after nightfall, they fly in the warm sunshine and hover over sweet flowers with all the activity of bees. When their wings are closed they are about as large as a good-sized bum-

ble-bee. They never light while taking their food, but dart from flower to flower with all the grace and rapidity of a humming-bird. We will call them the Fairy moths. The body of these insects is somewhat heavy, of a dark brown color, and covered with a feathery down, but the wings are exquisitely delicate. They expand about two inches, are long and narrow, and vibrate with great rapidity when the little insect hangs over a flower. They are composed of transparent lace-work with a reddish-brown border, which is very narrow except at the tip of the fore wings. The antennæ are long, and enlarged towards the end, but not knobbed."

Mr. Benedict stopped a moment and leaned on his desk, regarding the boys attentively.

"My young friends," said he, "it has been an untold pleasure to me to review with you during the Summer that is past a small part of my own studies in this beautiful section of Natural History. I have been also much gratified at the interest you all have manifested in collecting specimens and in listening to my lectures about them. It is my fond hope that this small beginning may awaken in some of you at least the desire to pursue the study further, and it is not impossible that, thus awakened, you may go on and become men high in the ranks of science.

"In this hope, and with the assurance that what we have studied is, however small, at least good in itself, I dismiss our last session as a class."

CHAPTER XXI.

THE BUTTERFLY FESTIVAL.



SUMMER was past. All along the roadside the Solidago and bright blue Asters, the last wild-flowers of the year, lifted their blossoms to meet the Autumn sun, and on every hillside stood clumps of Oak and Maple resplendent in their coats of maroon, and yellow, and scarlet.

These days were golden indeed to Annie Webb. She sat in her chamber watching the hazy Autumn sunlight brooding over the hills, while the scarlet leaves of the Woodbine over the window drifted in and lighted now on her hair, now on the carpet at her feet. She had walked about her chamber, but had not yet ventured to go down the stairs. One day she stood looking out into the yard where the bright yellow leaves from the Ash-trees before the house lay all about in heaps.

"O mother," said she, suddenly, "when I have heard the dry leaves rustle as Johnny ran over them, I have always longed to walk among them myself. Don't you think I might try to go out in the yard to-day?"

"Yes, Annie," said her mother, "I think you might try.

If it tires you to go down stairs, you can rest on your old seat by the front door."

Mrs. Webb threw her arm gently round the young girl and supported her as they went down stairs. It was a moment of great excitement to Annie. When they reached the door she turned away from her old seat with a half-suppressed sigh, as she thought of the long, long days she had spent there, and leaning on her mother's arm passed out into the sunny yard. It was true then at last. She stood out under the trees and among the fallen leaves and rustled them with her own little feet. She thought she had never heard sweeter music than the rustling of those leaves. When she at last turned to go back to the house, her face was flushed and her eyes shone with excitement.

"The boys can have their Festival now, mother," said she. "They have been very good to wait for me, but they need not wait any longer."

The boys had selected a lovely spot on the side of the mountain for their Festival. The Mountain Stream started from several springs near the hill-top, in the midst of a forest of noble Maples. For a little distance below its sources the banks on each side were gently sloped, smooth, and grassy, and this was the spot selected for the Festival ground. Just below this spot there was a beautiful cascade, which went tumbling down into a deep and narrow ravine. The sides of the chasm were rock and quite per-

pendicular. Graceful Birches intermixed with stately, unyielding Hemlocks, drooped over, and completely shut out the sun. It was always damp and gloomy in the gorge, and its walls were covered with exquisite moss. At the bottom rushed the Mountain Stream. A fairy-like scene it was to one standing just below the fall and looking up. Down through the Birches and dark green Hemlocks at the farther end of the ravine dashed the foamy water with a clear, cheerful sound, and ran on over the rocky bed, laughing merrily at its brave leap. Its spray rose lightly into the sunlight, and played in rainbow colors among the intricately woven boughs.

The Festival day came at last. Early in the morning the sun was quite concealed by a heavy white mist, but soon it parted here and there, showing clear blue sky beyond, and by the time our young folks were all wide awake the mist had rolled off down the valley out of sight.

The arrangements for the Festival were all complete. Annie had been chosen for the Queen of all the butterflies, and Rose Merton, Frank's cousin Mary, and two other girls were to be her assistant fairies. The boys had built a gorgeous throne in the grove. It was arched over with boughs of scarlet Maple, and festooned with long wreaths of evergreen, in which were fastened innumerable yellow butterflies, which Tom and Hal had been collecting all Summer for this very purpose.

The young folks began to gather on the bank of the Mountain Stream about noon. All our old friends of the butterfly class were there, and many other young people who had been invited to share the sports of the day. Tom and Hal, with Maggie Stewart, were the last to arrive.

"Now," said Jennie Graham, "we are all here ready to do homage to our Queen."

The young folks were waiting with much impatience for Annie to arrive. With the exception of Tom and Hal, no one had seen her since her recovery.

It was not long before a shout was heard from the boys who had been sent to the entrance of the picnic ground to herald the coming of the royal party. The children all watched eagerly for its approach, and very soon the procession appeared. Two maids of honor came first, and then Annie with Rose and little Mary. Behind them came Mr. Benedict, Annie's father and mother, and the parents of some of the other young folks. Annie was dressed in green, spangled all over with silver butterflies. On her head she wore a wreath of white flowers.

As Annie walked slowly across the green to her throne, the young folks made the woods ring with their shouts. It was almost too much to believe that she was with them there happy and well, instead of being the feeble lame girl they had known for so long a time.

Mr. Benedict took Annie's hand and assisted her to

mount the throne. The four maids of honor seated themselves on the moss-covered steps at her feet. Then Annie looked all round on the company and smiled her thanks for its hearty welcome.

"Now, boys," said Mr. Benedict, "while our pretty Queen is resting with her maids, let us all spend the time in games, after which we will see which boy will have the good fortune to win the privilege of escorting the Queen to lunch."

The boys had arranged a croquet ground on the green, and it was now taken possession of by a party of the young folks, others went to enjoy the swings which had been put up in the grove, and some strayed away in search of Autumn flowers and grasses. Maggie Stewart stayed with Annie and her maids of honor. The meeting between the two girls was very joyous. It was hard to say which felt the most pleasure, Maggie to know that her friend was well, or Annie to think that she was so partly through Maggie's instrumentality.

"So you are to be caught and carried off as a prize, Annie," said Maggie.

"O no," replied Annie, "I shall not be caught at all. The boys are to win me if they can, but they can't."

"And if they don't catch you, then they have no right to try for the maids of honor, have they?" asked modest little Mary.

"No, Mary. They must catch the Queen first, or go without any of us."

It was not long before the company, especially the boys, came trooping back to the green. They were on tiptoe to know about catching the Queen. When they were all assembled, Rose stood up by Annie and said that the Queen would now yield up her place as head of the Festival to any boy who could catch her. "The boy who succeeds," said Rose, "shall stand with the Queen at the head of the table and be hailed King of the Festival. If the Queen conquers all her subjects she shall have the right to choose her own companion."

By order of the girls the boys had built two seats on the throne, and they were now to fight for the right of occupying the vacant one by Annie's side. Rose said she thought the boys would yield to Mr. Benedict the right to make the first trial.

"No, no, we won't do that," said Tom, Hal, and a dozen others at once.

"Then you must draw lots for chances," said Rose.

Tom wrote some numbers on little pieces of paper and they were all shaken together in a basket, which Rose held, and each boy drew out one ticket. Only the boys belonging to the butterfly class were allowed to draw.

"Number one!" shouted Joe Dane, as he waved his ticket triumphantly over his head.

Annie came down the steps of her throne and stood on the grass. Joe Dane was waiting in great excitement to know what he was expected to do, when Rose stepped forward and handed him a grace-hoop and a pair of sticks. Another maid of honor gave a similar set to Annie.

"The boy who can crown me with the hoop," said Annie, "shall conduct me back to the throne and occupy the vacant seat by my side."

All the boys cheered loudly for the Queen and for the game. They were all skilful players and they laughed at Annie's confidence that no one could catch her.

"Where did Annie learn to play?" asked Gilbert.

"O, Annie used to play with me," said Johnny, "as she sat by the front door at home, and she never missed catching the hoop. I don't believe one of you can crown her."

At a signal from Rose the game started. The hoops, which were trimmed with flowers, flew back and forth through the air. Joe's four throws, which were all that were allowed to each boy, were soon given, and at every throw Annie caught the hoop gracefully and surely on the end of her sticks. The boys shouted as Joe threw down his sticks and retired discomfited from the field. Gilbert's turn came next. He confidently took up the sticks.

"Annie," said he, "it 's too bad for such a great fellow

as I am to play with you. I can throw the hoops so much faster than you can catch them."

For reply Annie sent a hoop whirling at his head which, before he could spring and catch it, landed safely on his broad shoulders.

"Now do the same to me if you can," said Annie.

But it was no use. Boy after boy tried his skill and failed.

"Annie will get tired at last," said Ben Wait, "and then she will be easily caught."

"No, she won't be tired," said Johnny. "She often plays with me all the afternoon."

At length all had tried and failed except Hal. He took his place and gave all his attention to the throws. Playing as fast as they were, it did not take long for the trial to be over. Annie caught the last hoop and whirling it on her sticks turned in triumph to the boys.

"Now Annie is Queen," shouted little Frank, "and she must ascend the throne alone."

"No, Frankie," said Annie, "I shall not mount my throne alone. I am going to take you with me."

She went forward and taking the little fellow's hand, led him up the steps and placed him in the chair at her side. Then turning to the company she bade them all do homage to their King. The whole party, vexed as they were at their own failure to win the place of honor, burst

into roars of laughter, and all hastened forward to greet Frank as King. The little fellow was almost wild with delight.

"Now," said Annie, "choose your companion and we will march to the lunch table."

"I am bound to catch somebody," said Joe Dane, and seizing a grace-hoop he threw it over the head of little Mary and led her off in triumph.

The boys had built a rustic table just within the grove, for the lunch. It was trimmed with evergreen and red leaves, and in the centre was placed a small Fir-tree, its branches ornamented with gay-colored butterflies.

The party spent a long time about the table. Annie was full of fun. As she moved about among them all, her silver butterflies glistening in the light, she seemed to be in a new world.

After lunch they spent the time in singing and playing games. But the day passed away, as all sweet things do, and the long shadows of the setting sun at length warned them to turn towards home.

It was Tom's last evening in the country. After the picnic the whole party walked home with him to his uncle's house. They were all unwilling to bid him good by, for through the long Summer days he had been their favorite companion, skilful and ready at all their games, and always full of fun and good-nature.

The parting words were all said at last. Tom stood under the Elm with his sister and his two cousins, and watched his young friends go off down the road. At the foot of the hill they all turned and waved their handkerchiefs as a last good by, and then passed out of sight.



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